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AN
INTRODUCTION
TO
BOTANY.
CONTAINING
AN EXPLANATION
OF THE
THEORY of that SCIENCE;
EXTRACTED FROM THE
WORKS of Dr. LINNÆUS;
WITH
TWELVE COPPER-PLATES,
TWO EXPLANATORY TABLES,
AN
APPENDIX,
AND
GLOSSARY.

THE THIRD EDITION, CORRECTED,
WITH LARGE ADDITIONS.

By JAMES LEE, NURSERYMAN,
at the VINEYARD, HAMMERSMITH.

L O N D O N,

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R. BALDWIN.

MDCCLXXVI.

DEPARTMENT OF THE ARMY



TO THE VERY EMINENT
D^R. LINNÆUS,

Knight of the Polar Star, first Physician to the King of *Sweden*, Professor of Botany at *Upsal*, Fellow of the Academies of *Upsal*, *Stockholm*, *Petersburgh*, &c. &c. &c.

S I R,

THE permitting me to dedicate the following Sheets to you, is the highest Point of my Ambition, and a Mark of my Gratitude and Esteem, for the Instruction and Pleasure I have received in the Perusal of your truly learned and excellent Works. The Doctrines therein contained are calculated not only to make Men wiser, by teaching them the Knowledge of Things, but to make them better and happier, in admiring the Creator in his wonderful Creation. You have led your Readers, by an *Ariadne's* Clue, through the Turnings and Labyrinths of the three Kingdoms of Na-

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ture, and by a scientific and perspicuous Method, explained her Laws, in a Manner superior to all that have gone before you. The INTRODUCTION TO BOTANY owes its first Principles to you, being collected from your Works, particularly the *Philosophia Botanica*; nothing of it can be called mine, but its being cloathed in an *English* Dress; the addressing you in the Front of my Book can therefore add nothing to your Instruction or Fame; your giving me Liberty to prefix your Name there, does me the greatest Honour, at the same Time that it tells the World this Dedication is free from Interest and Flattery, as it is to you, whom I have never seen, nor ever expect to see; my only Motive in this, proceeds from a grateful Sense of your superior Merit, and to applaud you for the useful Lessons you have given to Mankind.

I am,
with great Respect,
your most devoted,
and obedient humble Servant,

JAMES LEE

P R E F A C E.

THOUGH the Study of Botany is of late Years become a very general Amusement in this Country, there has yet appeared no Work, in our own Language, that professedly treats of the Elements of that Science; it is therefore hoped, that what is now offered to the Public, if it shall appear to have been carefully executed, will be considered as a Performance of some Utility. The Matter it contains, or at least the far greater Part of it, will probably be new to the *English* Reader; for though some few Explanations of the same Kind may be found interspersed in larger Works, these are for the most Part too costly to fall into many Hands; nor could the Reader expect to find therein the Whole of what he seeks, the explaining the Theory of the Science not having been the immediate Object of those Publications.

The Matter of the following Sheets has been collected from the Works of the celebrated Dr.
Lin-

Linnaeus; whose Labours for the Reformation of this Science in general, and whose Invention of the Sexual System in particular, are well known. As the Writings of this learned Professor are interspersed with philosophical and critical Remarks, that are of less general Use, it was thought that a direct Translation of any of his Works would not be so well received, as what is now given; which contains an Extract of his most material Doctrines. The Method in which these have been distributed in the following Chapters, we propose to explain; but to render this more intelligible, it will be expedient to lay before the Reader a short Account of those Discoveries that have given Occasion to the Moulding of this Science into a Form so different from that in which it appeared in the last Century.

The *Sexual System* of Botany, as its Title imports, is founded on a Discovery that there is in Vegetables, as well as in Animals, a *Distinction of the Sexes*. This was not wholly unknown to the Ancients; but their Knowledge of it was very imperfect. In order to shew in what Respect this Discovery has been investigated farther by the Moderns, it will be necessary to anticipate

cipate Part of the Subject-Matter of the following Chapters.

It will be seen in the Course of this Work, that the Flowers of the Generality of Vegetables are *Hermaphrodite*, containing within them the Characters of both Sexes ; but that in the Classes *Monoecia* and *Dioecia*, the Sexes are parted, and allotted to different Flowers ; and that in the Class *Dioecia* in particular, the Sexes are even on different Plants, the Male Flowers growing all upon one Plant, and the Female upon another. Now this last Circumstance the Ancients had observed : indeed it could hardly escape their Notice ; for the Palm-Tree, whose Fruit was in Esteem, being of the Class *Dioecia*, a very little Observation was requisite to teach them, that in these Trees the Flowers of the Male were necessary to ripen the Fruit of the Female. Accordingly we find, in the Account given by *Herodotus* * of the Country about *Babylon*, where these Trees are in plenty, that it was a Custom with the Natives, in their Culture of this Plant, to assist the Operations of Nature, by gathering the Flowers of the Male Trees, and carrying

* Book the First.

them to the Female. By this Means they secured the Ripening of the Fruit; which might else, from unfavourable Seasons, or the Want of a proper Intermixture of the Trees of each Sex, have been precarious, or at least not to have been expected in equal Quantities.

It seems pretty extraordinary, that this Discovery should not have led the Ancients to detect the whole Process of Nature in the Propagation of the various Species of Vegetables; and yet it does not appear, by any of their Writings, that are come down to us, that they went farther than this obvious Remark upon the Palm-Tree, and some similar Notions concerning the Fig. They had indeed, from what they saw in these Plants, formed a Notion that all others were Male and Female likewise†; but this Notion

* Thus *Theophrastus*:

“ In Trees, considered universally, and taking in each several Kind, there are, as has been said, many Differences. One of these is common to them all, namely, that by which they are distinguished into Female and Male, of which the one bears Fruit, the other not, in some Kinds; in those in which both bear Fruit, that of the Female is the best, unless these are to be called Males, for so they are called by some.”

Hist. Pl. Book iii. Chap. 9.

was

was false, the far greater Part having Hermaphrodite Flowers, and serves to convince us, that what they discovered of the Palm and Fig, was only a right Guess, and not founded on any Knowledge of the Anatomy of Flowers, either in those Trees, or any others.

In this dark State the Doctrine of the Sexes of Vegetables remained, not only through all the Ages of Antiquity, but almost to the End of the last Century, the Moderns seeing no more of this Doctrine than the Ancients had done before them; and hence we have to this very Hour in Use, the false Distinctions of Male and Female Species of *Cornus*, *Pæony*, *Cistus*, and many others, which have all Hermaphrodite Flowers, the Distinction in these Cases being grounded on nothing more than some Difference in the Habit of the two Species with which the Sexes are no Ways concerned.

The Honour of having first suggested the true sexual Distinctions in Plants appears to be due to our own Countryman, Sir *Thomas Millington*; from whose Hints Dr. *Grew*, as the Doctor himself acknowledges, was led to the Observations he has given on this Subject, in his

Anatomy of Plants *. After this, *Camerarius*, *Moreland*, *Geoffroy*, *Vaillant*, *Blair*, *Jussieu*, and *Bradley*, pursued their Enquiries and Experiments so far as to remove all Doubt concerning these Discoveries; and lastly, Doctor *Linnaeus* founded thereon the System of Botany, which we are going to explain in this Work.

The Sexual Hypothesis, on its first Appearance, was received with all that Caution that becomes an enlightened Age; and Nature was traced experimentally through all her Variations, before it was universally assented to. *Tournefort* refused to give it any Place in his System; and *Pontedera*, though he had examined it, treated it as chimerical; but the Proofs which Dr. *Linnaeus* has stated amongst the Aphorisms of his *Funda-*

* Published in the Year 1682. The Doctor expresses himself thus:—"In Discourse hereof with our learned Savilian Professor, Sir *Thomas Millington*, he told me, "he conceived that the Attire doth serve as the Male, "for the Generation of the Seed. I immediately replied, that I was of the same Opinion, and gave "him some Reasons for it, and answered some Objections which might oppose them, &c." *Anat. of Plants*, 171.

*menta Botanica**, and farther explained and illustrated in his *Philosophia Botanica* †, are so clear, that the Birth of Animals is not more evidently the Consequence of an Intercourse between the Sexes, than that of Vegetables; and it would be now as ridiculous for any one, who has looked at the Arguments, to doubt of the one as of the other.

We shall not attempt to lay all these Proofs before the Reader; our Business is to explain, not demonstrate; but as it may be satisfactory to see some one Fact established, that carries conviction with it, we shall here give an Extract of a Letter from *Berlin*, inserted in the *Philosophical Transactions* ‡, concerning a remarkable Experiment made on the Palm-Tree.

*Extract of Mr. Mylius's Letter to Mr. Watson,
dated at Berlin, Feb. 20, 1750—51.*

“ The Sex of Plants is very well confirmed,
“ by an Experiment that has been made here on
“ the *Palma major foliis flabelliformibus*. There

* Aphorism 132 to 150.

† Page 86 to 96.

‡ Vol. xlvii. Page 169.

“ is a great Tree of this Kind in the Garden of
“ the Royal Academy. It has flowered and bore
“ Fruit these thirty Years, but the Fruit never
“ ripened, and when planted, it did not vege-
“ tate. The Palm-Tree, as you know, is a
“ *Planta Dioecia*, that is, one of those in which
“ the male and female Parts of Generation are
“ upon different Plants. We having therefore
“ no male Plants, the Flowers of our female
“ were never impregnated by the Farina of the
“ Male. There is a male Plant of this Kind in
“ a Garden at *Leipsic*, twenty *German* Miles from
“ *Berlin*. We procured from thence, in *April*,
“ 1749, a Branch of male Flowers, and sus-
“ pended it over our female ones, and our Ex-
“ periment succeeded so well, that our Palm-
“ Tree produced more than an Hundred per-
“ fectly ripe Fruit ; from which we have already
“ eleven young Palm Trees. This Experiment
“ was repeated last Year, and our Palm-Tree
“ bore above two Thousand ripe Fruit. As I
“ do not remember a like Experiment, I thought
“ it convenient to mention it to you ; and if you
“ think proper, be pleased to communicate it to
“ the Royal Society.”

This

This Letter, which was read to the Society the 2d of *May*, 1751, with some ingenious Observations on the same Subject, by Dr. *Watson*, F. R. S. to whom it was addressed *, has established the Fact, attested by the Ancients, concerning the Palm-Tree, which some may perhaps have looked upon as fabulous ; and, as the Fructification in other Vegetables, though it may differ in particular Circumstances, has yet in general a manifest Conformity with that of the Palm-Tree, in respect to the Parts supposed to be the Organs of Generation, which are discoverable either on the same, or on a separate Flower, in all but the Class *Cryptogamia*, where they are too minute for Observation ; so from this single Experiment we may fairly draw an Argument by Analogy, for the Confirmation of the whole sexual Hypothesis : But there are, as has been said, other, and better Proofs. We have already directed the Reader to those stated by *Linnaeus* ; whoever desires farther Satisfaction concerning this Point, may see the several Demonstrations collected, and methodically connected in the *Sponsalia Plantarum* of *J. Gustavus Walkbloom*,

* Printed also in the Philosophical Transactions with the Letter.

published in the *Amoenitates Academicæ* at *Leyden*,
in 1749.

HAVING thus explained, as far as seems necessary, the new Principles upon which the Reformation of the former vicious Systems of Botany has been undertaken by the later Botanists, we come to shew, as we proposed, the Method that has been followed in this INTRODUCTION to the Science.

The Work is divided into three Parts, and each Part into sundry Chapters. The Subject of each Chapter may be seen in the Table of Contents prefixed to the Work; but with Respect to the three Parts, as no Title or Head explanatory of the Matter each contains, could be conveniently prefixed to them, it will be proper to explain here the Scope of this Division.

Vegetables, according to *Linnaeus*, are primarily divisible into three Parts. 1. The *Root*. 2. The *Herb* or Plant itself. 3. The *Frustrification*. And in this Order these Parts might have been treated, were it not on Account of the Sexual System; but as the Explanation of the latter was the principal Object of this Work,
it

it became necessary to give up the Order of the Parts of the Vegetable, and follow that of the System.

The System is divided, 1, into *Classes*. 2. *Orders*. 3. *Genera*. 4. *Species*. 5. *Varieties*. Now as the *Classes*, *Orders*, and *Genera*, which come first in the System, are established on the *Fructification* alone, it became necessary to give this Part of the Vegetable the Preference in Point of Order; and we have accordingly made the *Fructification* the Subject of the several Chapters of the first Part of this Work.

In the second Part, we have given a full Explanation of the *Classes*, *Orders* and *Genera* of the System; which indeed contain the whole *Theoretic* Part of it, the Doctrines of *Species* and *Varieties* having, as *Linnaeus* observes, a nearer Relation to the *Practice*. The Reason for proceeding to the System immediately after the *Fructification* is manifest; as the Theory of the System is established on the *Fructification* alone, an Account of the latter was all that was necessary to prepare the Reader for understanding the Explanation of the former, which, as has been said, was the principal Object of the Work.

In the third and last Part, the two remaining Parts of the Vegetable, *viz.* the *Root* and *Herb*, are treated of: And as these chiefly furnish the Doctrines that respect the two last Divisions of the System, *viz.* *Species* and *Varieties*, so these Doctrines are also included in this third Part, and make the Conclusion of the Work.

The Two Tables subjoined to the Work, have their Explanation prefixed; and we shall only speak here of their Utility. It is presumed that no exact Table of the *Linnean Genera* with their *English* Names, and a Reference to their Classes and Orders, as given in the first Table, has yet appeared in Print, our Writers not having adopted all the *Linnean* Names, nor followed that Author exactly in his Distribution of Vegetables; our first Table therefore cannot but be of great Use to those who are desirous of becoming acquainted with the Method of *Linnaeus*, and of framing the Lists of their private Collections upon the Plan of his System.

The Utility of the second Table, which contains the Names of the Genera rejected by *Linnaeus*,

neus, is obvious ; it might have been augmented to ten Times it's Bulk, had all the Names been inserted that have been given to Vegetables by the numerous Writers on this Science ; but such a Collection would be a Work of itself ; and it has been therefore thought adviseable, to confine it to those only that are cited in the *Genera Plantarum* of *Linnaeus*, which contains the principal.

The *Table* of *English* Specific and Generic Names referred to in their *Linnaean* Titles, which is given in the *Appendix*, was not originally intended to have been added to the Work ; but its Utility to the *English* Botanist having been warmly insisted on by some of the Author's Friends, it was prepared whilst the rest of the Work was under the Press, and subjoined to it as an *Appendix*. It has been executed with Care : If nevertheless any Mistakes or material Omissions should appear, those who are versed in Botany will be the most ready to excuse them, as they must know the Difficulty of such an Undertaking, on Account of the great Number of Removes, made by Dr. *Linnaeus*, of particular Species, as well as of Genera, from their old Stations ; this

Diffi-

Difficulty was the greater, because the Method of *Linnaeus* has hitherto been but partially adopted by our Writers, and therefore no Table given in any Work already published, could be depended on.

The Designs for the Figures of the Plates are for the most Part taken from those given by *Linnaeus* in his Works. Some of them, might, perhaps, have been mended by fresh Designs from Nature; but as the Work here given to the Public is professedly an Extract of the *Linnaean* Doctrines, it was thought that the Figures he had himself selected, would, upon the whole, come the nearest to his own Meaning, and be of the greatest Help in explaining it.

The Reader will find placed before the Glossary, a Collection of all the Terms of Art, explained and numbered; the Use of these Terms, so collected, will appear evident, from the Manner of their Arrangement, beginning with the Root, and continued through the Trunk, Branches, Leaves, and Fructification.

This

This will be necessary on all Occasions to the Learner in Botany, either in describing Plants, or in finding out the true Meaning of the Descriptions of Authors, every Term respecting the different Parts of the Plant, may be seen at one View, belonging to the Article wanted, whether it is the Root, Stem, Leaf, or Flower.

The Use of the Glossary is to assist young Beginners who are unacquainted with scientific Method; and can with greater Ease turn to an Alphabet for the Explanation of a Term, than to classical Arrangement.

The whole Work is corrected and enlarged by an Addition of all the new Genera, collected from the last Edition of the *Systema Natura*.

The first of these is the fact that the
the second is the fact that the
the third is the fact that the
the fourth is the fact that the
the fifth is the fact that the

The sixth is the fact that the
the seventh is the fact that the
the eighth is the fact that the
the ninth is the fact that the
the tenth is the fact that the

The eleventh is the fact that the
the twelfth is the fact that the
the thirteenth is the fact that the
the fourteenth is the fact that the
the fifteenth is the fact that the

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BY Fruſtification we are to underſtand both the *Flower* and *Fruit* of Plants; which cannot well be ſeparated: For though the Fruit does not ſwell and ripen till after the Flower is fallen, its Rudiment, or firſt Beginning, is in the Flower, of which it properly makes a Part. *Linnaeus* defines the Fruſtification to be a temporary Part of Vegetables, allotted to Generation, terminating the old Vegetable, and beginning

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ning the new. It consists of seven principal Parts, *viz.*

1. The CALYX, *Empalement*, or *Flower-cup*.
2. The COROLLA, *Foliation*, vulgarly called, *the Leaves of the Flower*.
3. The STAMINA, *Threads*, vulgarly called, *the Chives*.
4. The PISTILLUM, *Pointal*.
5. The PERICARPIUM, *Seed-vessel*.
6. The SEMINA, *Seeds* themselves.
7. The RECEPTACLE, *Base*, on which the Fructification is seated.

All these Parts, and their several Uses, will be particularly explained in the following Chapters ; and it is sufficient to observe here, that the four first, *viz.* Calyx*, Corolla, Stamina, and Pistillum, are properly Parts of the *Flower* ; and the three last, Pericarpium, Semina, and Receptacle, Parts of the *Fruit* ; and that it is from the Number, Proportion, Positions, and other Circumstances attending these Parts of Fructification, that the Classes of Vegetables, and

* That the Calyx is a Part of the Flower, though it often attends the Fruit, is manifest from hence ; that there is no Instance of its coming out after the Plant has done flowering, although in the *Pantagonula* the Calyx is observed to grow to a much larger Size in the Fruit than it had in the Flower.

the Genera they contain, are to be characterized according to the sexual System.

C H A P. II.

Of the C A L Y X.

THE CALYX is the Termination of the *Cortex*, or *outer Bark*, of the Plant; which, after accompanying the Trunk or Stem through all its Branches, breaks out with the Flower, and is present in the Fructification in this new Form. Its chief Use is to enclose and protect the other Parts. It has received different Appellations, according to the Circumstances with which it is attended, *viz.*

PERIANTHIUM, a *Flower-cup*, when its Station is close to the Fructification. If it includes the Stamina, and not the Germen, it is the Perianthium of the Flower; if the Germen, but not the Stamina, the Perianthium of the Fruit; but if it includes both, it is the Perianthium of the Fructification.

INVOLUCRUM, a *Cover*, when stationed at the Foot of an Umbel, at a Distance from the Flower; it is an universal Involucrum, if it is under the universal Umbel; or a partial one, if under a partial.

AMENTUM, Catkin, when it proceeds from one common Receptacle, resembling the Chaff of an Ear of Corn.

SPATHA, Sheath, when it bursts lengthways, and puts forth a *Spadix* *.

GLUME, Husk, in grasses, which it folds over with its Valves; and the sharp Point or Beard issuing from the Glume is called an *Arista*.

CALYPTRA, a Veil, in Mosses, where it is placed over the *Antherae*, tops of the *Stamina*, and is hooded like a Monk's Cowl.

VOLVA, from its *involving*, or *enfolding*, in the *Fungi*, or *Mushroom-tribe*, where it is membranaceous, and rent on all Sides.

It is sometimes difficult to distinguish a Calyx from the *Bractea*, floral Leaf†, such as

* *Spadix* properly signifies the Receptacle of a Palm: see Chap. 8. But *Spatha* is not confined only to such Plants as have a *Spadix* in this Sense of the Term, but is applied to *Narcissus*, *Galanthus*, *Pancratium*, and many others, whose Flower-stalks come out of a Sheath. *Spadix* therefore is here to be understood in a more general Sense: Agreeable to such Latitude we shall find it used in Chap. 19. under the Head of *spadiceous aggregate Flowers*, to express the common Receptacle in *Calla*, *Dracontium*, *Pothos*, *Arum*, and *Zostera*, as well as in the *Palms*.

† In many Plants there are found green Leaves amongst the Flowers, that differ in shape from the ordinary Leaves of the Plant. These are the *Bractea*, or *floral Leaves*, here spoken of. They are commonly situated on the Flower-

is found to accompany the Fructification of the *Tilia*, *Lavandula*, *Melampyrum*, and others. They may be distinguished by this certain Rule, that a Calyx always withers when the Fruit is ripe, if not before ; but the Bractea will remain longer. Without attending to this, Mistakes might easily be made in *Helleborus*, *Nigella*, *Passiflora*, *Hepatica*, *Peganum*, and others, in which the Calyx is wanting. The Distinction between a Calyx and Corolla in doubtful Cases will be treated of in the next Chapter. In many Flowers the Calyx is deciduous, dropping off the Instant the Flower begins to expand ; this is the Case with *Epimedium* and *Papaver*.

C H A P. III.

Of the COROLLA.

THE COROLLA, is the Termination of the *Liber*, or *inner Bark*, continued to, and accompanying the Fructification in this new Form of painted Leaves.

Flower-stalks, and sometimes so near to the Flower, as to be mistaken for its Calyx.

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Its Use is the same as that of the Calyx, serving as an inner Work of Defence, for the Parts it encloses, as the Calyx, which is usually of stronger Texture, does for an outer one.

The Leaves of which the Corolla consists are called *Petals*; by which Appellation they are conveniently distinguished from the green Leaves of the Plant with which they might else be confounded*. The Petal is defined by *Linnaeus* as a corollaceous Covering to the Flower, meaning that it encloses and pro-

* *Petal* (in the Greek *πετάλον*) signifies Leaves in general; but there being another Greek Word (*φύλλον*) nearly of the same Signification, the modern Botanists have borrowed this to express the Leaves of the Flower. The Antients seem to have had no distinct Term in Use to express this Part of the Frustrification. Thus *Virgil*, in describing his *Amellus*, which is a Species of *Aster*, the Flower of which has a yellow Middle, and purple Rays, calls it a golden Flower, surrounded with purple Leaves.

*Aureus ipse (Flos) sed in foliis, quæ plurima circum
Funduntur, violæ subluet purpura nigræ.*

GEORG. IV.

This loose expression, which is chargeable rather on the Language than the Poet, has misled all its Translators; as is rightly observed by *Martin*, in his Note on this Passage. *May* and *Addison* make the real Leaves of the Plant purple.

For from one Root he spreads a Wood of Boughs,
Whose many LEAVES, altho' the Flower be gold,
Black Violets dimme purple Color hold. MAY.

The

tests it in the manner of a *Corolla*, or *Wreath*.
If the *Corolla* be

MONOPETALOUS, of one *Petal*; it consists of two Parts, viz. The *Tube*, or lower Part, which is usually *Tube-shaped*; and the *Limb*, or upper Part, which usually spreads wider. And the *Limb* again, according to its Figure, is either *Campanulate*, *Bell-shaped*, that is, bellying out, and without a *Tube*; *Infundibuliform*, *Funnel-shaped*, that is, of the Figure of a *Cone*, and standing on a *Tube*; *Hypocrateriform*, *Salver-shaped*, that is, plain or flat, and standing on a *Tube*; *Rotatoplane*, *Wheel-shaped and flat*, without a *Tube*; or *Ringent*, *gaping*, that is, irregular and perfo-

The Flower itself is of a golden Hue.

THE LEAVES inclining to a darker Blue.

THE LEAVES shoot thick about the Root, and grow into a Bush; and shade the Turf below.

ADDISON.

DRYDEN applies the same Color to the Boughs.

For from one Root the rising Stem bestows

A Wood of Leaves, and Vi'let purple BOUGHS.

The Flower itself is glorious to behold,

And shines on Altars like resurgent Gold.

DRYDEN.

Dr. TRAPP applies the golden Color to the Stem, and the purple to the Leaves.

For from one Turf a mighty Grove it bears;

Its STEM of golden Hue; but in its LEAVES,

Which copious round it sprout, the purple Teint

Of deep-dyed Violets more glossy shines.

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nated with two Lips. But if the Corolla be

POLYPETALOUS, of many Petals; each Petal consists of *Unguis*, a *Claw*, which is the lower Part fastened to the Base; and *Lamina*, a *thin Plate*, which is the upper Part, and usually spreading. A polypetalous Corolla is *cruciform*, *cross-shaped*, when it consists of four Petals that are equal and spreading; and *Papilionaceous*, *Butterfly-shaped*, when it is irregular, consisting of four Petals, of which the under one resembles the Keel of a Ship, the upper one rises, and the two side ones stand single.

There belongs also to the Corolla a Part called the *Nectarium*, which has been but newly distinguished, having been by former Botanists confounded with the Petals. It is by *Linnaeus* defined to be the Part which bears the Honey, and belonging to the Flower only. This Part affords a wonderful Variety in the manner of its appearance. In some Plants it is very large, as in the *Narcissus* and *Aquilegia*; in the former of which the Cup, and in the latter the Horns, are *Nectaria*: In others it is scarce discoverable, even with Glasses. In some Plants it is united with, and makes Part of, the Petals: In others it is detached from them. Its Shape and Situation are also as various. Its Use is
not

not known, unless the Supposition of its secreting the Honey may be depended upon.

Between the Calyx and Corolla Nature has put no absolute limits ; as is plain from the *Daphnis*, in which Plant they grow together, and are united in the Margin, like a Leaf of the *Buxus* ; but they may be commonly distinguished by their Position in respect of the Stamina, the Petals and Stamina being ranged alternately ; whereas the Segments of the Calyx and the Stamina answer to each other. That this is their natural Situation, appears from the complete Flowers in the Classes *Tetrandria* * and *Pentandria* † : And the Use of applying this Rule will be found in the Instances of *Chenopodium*, *Urtica*, and *Parietaria* ; where it decides, that the single Cover in those Genera is a Perianthium, and that it is the Corolla that is wanting. Should we infer, where only one of the two Covers appears, that it is a Corolla, because that is a more principal Part, there would be no Certainty from such an Inference ; as is evident from the *Ammania*, *Isnarda*, *Peplis*, *Ruellia* and *Campanula*, in all which the Corolla is often found wanting, but not the Calyx.

* See Part II. Chap. 7.

† See Part I. Chap. 8.

That

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That the Calyx, as proceeding from the Cortex of the Plant, is coarser and thicker than the Corolla, which is produced by the soft, pliant, colored Liber, is obvious to every one. But there are no Limits determinable from any such Circumstances, unless it be from the Color; and even this is not sufficient; for the Perianthium of the *Bartsia* is Blood-colored; and there are also many Flowers whose *Corollæ* are colored, naked, and subject to lose their Petals when in the State of Flowering, but which afterwards harden and turn Green, and remain on the Plant like a Calyx; as for Instance, the *Helleborus* and *Ornithogalum*.

The *Euphorbia* has deceived many, who have described it as monopetalous, taking the Calyx for the Corolla. But that the *Peltæ**, as they are called, upon the Leaves of the *Lichen*, are really the Petals of the Flower, is proved by some annual Species in *India*, in which there are white Petals very distinguishable.

* The *Peltæ* are the Fructification of the *Lichen*. They are flat, and are for the most Part fastened to the Edges of the Leaves.

C H A P.

CHAP. IV.

Of the STAMINA.

THE STAMINA are the Male Part of the Flower. *Linnaeus* defines them as an Entrail of the Plant, designed for the Preparation of the *Pollen*; of which we shall speak presently.

Each single *Stamen* consists of two Parts, viz.

1. *FILAMENTUM*, the *Filament* or *Thread*; which serves to elevate the *Anthera*, or *Summit*, and at the same Time connects it with the Flower.

2. *ANTHERA*, the *Summit* itself; which contains within it the *Pollen*, and when come to Maturity discharges the same.

The *POLLEN*, *Meal*, contained within the *Antheræ*, is a fine Dust secreted therein, and destined for the Impregnation of the *Germen*; of which Part we shall speak in the next Chapter.

The *Stamina* being, as I have said, the Male Part of the Flower, the Construction and Distribution of the sexual System is principally founded upon, and regulated by it; as will appear in the Explanation of the System

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stem. It is sufficient to observe here, that such Flowers as want this Part are called *Female*; such as have it, but want the Female Part described in the next Chapter, *Male*; such as have them both, *Hermaphrodite*; and such as have neither, *Neuter*.

CHAP. V.

Of the PISTILLUM.

THE PISTILLUM is the Female Part of the Flower: It is defined by *Linnaeus* as an Entrail of the Plant, designed for the Reception of the Pollen. It consists of three Parts.

1. The *GERMEN*; which is the Rudiment of the Fruit accompanying the Flower, but not yet arrived at Maturity.

2. The *STYLE*; which is the Part that serves to elevate the Stigma from the Germen.

3. The *STIGMA*; which is the Summit of the Pistillum, and covered with a Moisture for the Breaking of the Pollen.

It has been said in the last Chapter, that the Pollen was destined to the Impregnation of the Germen: This is performed in the
fol-

following Manner. The *Antheræ*, which at the first opening of the Flower are whole, burst open soon after, and discharge the Pollen; which dispersing itself about the Flower, Part of it lodges on the Surface of the Stigma, where it is detained by the Moisture with which that Part is covered; and each single Grain or Atom of the Pollen bursting and dissolving in this Liquor, as it has been observed to do by the Microscope, is supposed to discharge something that impregnates the Germen below: What the Substance is that is so discharged, and whether it actually passes through the Style into the Germen, seems yet undetermined, it being difficult to observe such minute Parts; but whatever be the Operation by which Nature produces the Effect in Question, the Cause, as far as it has been here explained, is scarce disputable; and accordingly we see, that after this Impregnation, when the Parts of the Flower that have done their Office are fallen away, the *Germen* swells to a Fruit big with Seeds, by which the Species is propagated. The Pistillum being, as I have said, the Female Part of the Flower, is of great Consequence in the sexual System, as well as the Male Part; as will appear when the System comes to be explained.

C H A P.

C H A P. VI.

Of the PERICARPIUM.

THE PERICARPIUM, *Seed-vessel*, is the Germen described in the last Chapter grown to Maturity. It is defined by *Linnaeus* as an Entrail of the Plant big with Seeds, which it discharges when ripe.

It is distinguished, according to the Circumstances that attend it, by the following Appellations.

CAPSULA, a *Capsule*, is a hollow Pericarpium, which cleaves or parts in some determinate Manner. The Inclosure of the Capsule, which surrounds and covers the Fruit externally, is called a *Valvule*; the Partitions, which divide the Capsule into sundry Compartments or Cells, *Dissepiments*; the Substance which passes through the Capsule, and connects the several Partitions and Seeds, *Columella*; and the Cells, or hollow Compartments of the Capsule in which the Seeds are lodged, *Loculaments*.

SILIQUA, a *Pod*, is a Pericarpium of two Valves, wherein the Seeds are fastened along both the Sutures or Joinings of the Valves.

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LEGUMEN, a *Pod* also, is a Pericarpium of two Valves, wherein the Seeds are fastened along one Suture only.

CONCEPTACULUM, a *Conceptacle*, is a Pericarpium of a single Valve, which opens on one Side lengthways, and has not the Seeds fastened to it.

DRUPA, is a fleshy or pulpy Pericarpium without Valve, containing a Stone.

POMUM, is a fleshy or pulpy Pericarpium without Valve, containing a Capsule.

BACCA, a *Berry*, is a fleshy or pulpy Pericarpium without Valve, the Seeds within which have no other Covering.

STROBILUS, is a Pericarpium formed of an *Amentum* *.

C H A P. VII.

Of the SEEDS.

THE SEED, according to the Definition of *Linnaeus*, is a deciduous Part of the Vegetable, the Rudiment of a new one, quickened for Vegetation by the Sprinkling of the Pollen. Its Distinctions are,

* See Chap. 2.

A SEED,

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A *SEED*, properly so called, which is a Rudiment of a new Vegetable, furnished with Sap, and covered with a bladdery Coat or Tunic. It consists of, 1. *Corculum*, the first Principle of the new Plant within the Seed. 2. *Plumula*, a scaly Part of the Corculum; which ascends. 3. *Rostellum*, a plain Part of the Corculum; which descends. 4. *Cotyledon*, a side Lobe of the Seed, of a porous Substance, and perishable. 5. *Hilum*, an external Mark or Scar on the Seed, where it was fastened within the Fruit. 6. *Arillus*, the proper exterior Coat or Tunic of the Seed; which comes off of itself. 7. *Coronula*, the little Crown, of a Seed; which is either *Calyculus*, the *Calyx* of a Floret, adhering to the Seed, and assisting it to fly; or *Pappus*, a Down, which is a feathery or hairy Crown answering the same End, and connected with the Seed by *Stipes*, a Trunk, which here signifies the Thread on which the Down is raised and supported. 8. *Ala*, Wing, a Membrane affixed to the Seed, and which by its flying helps to disperse it.

NUX, a Nut; which is a Seed inclosed with an *osseous Epidermis*, a bony or hard outer Skin, commonly called the Shell.

PROPAGO; which is the Seed of a Moss, first discovered by *Linnæus*, who peeled off the

the Bark, and detected it in the Year 1750. These Seeds have neither Tunic nor Cotyledon, but consist only of the Plumula of a naked Corculum, where the Rostellum is inserted into the Calyx of the Plant.

C H A P. VIII.

Of the RECEPTACLE.

THE RECEPTACLE, is the Base which connects the other six Parts of Fructification. Its various Appellations are as follow.

A *PROPER RECEPTACLE*, is that which belongs only to the Parts of a single Fructification: And this is called a *Receptacle of the Fructification*, when it is common to both Flower and Fruit; a *Receptacle of the Flower*, when it is a Base to which the Parts of the Flower only are fastened without the Germen; a *Receptacle of the Fruit*, when it is a Base for the Fruit only, remote from the Receptacle of the Flower; a *Receptacle of the Seeds*, when it is a Base that fastens the Seeds within the Pericarpium.

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A COM-

A *COMMON RECEPTACLE*, is that which connects many Florets in such a manner, as that the taking away any of them would cause an Irregularity. *Palea*, a *Chaff*, is a thin Substance, springing from the Receptacle to part the Florets.

UMBELLA, an *Umbel*, is a Receptacle, which, from a common Center, runs out into Thread-shaped Foot-stalks of proportionate Lengths. It is called a *simple Umbel*, when it has no Subdivisions; a *compound Umbel*, when each Foot-stalk is terminated by an *Umbellula*, or *little Umbel*; and in this Case, the Umbel that bears the Umbellula on its Foot-stalks, is called an *universal Umbel*; and the Umbellula which proceeds from the universal Umbel, a *partial Umbel*.

CYMA, a *Cyme*, is a Receptacle that runs into long fastigate Peduncles *, proceeding from the same universal Center, but with irregular partial ones.

SPADIX, is the Receptacle of a Palm †,

* *Peduncles*, *Flower-stalks*, are called *Fastigate*, when their Lengths are so proportioned, that the Flowers which they support form an even Surface.

† This is the proper Sense of the Term, as employed by the Ancients: But *Spadix* is now used in a more general Sense, viz. to express all Flower-stalks that come out of a *Spatha*; see the Note on this Subject in Chap. 2. This Definition therefore appears to be too strict.

pro-

produced within a *Spatha*, or *Sheath*, on the Branches that bear Fruit.

C H A P. IX.

Of the distinct Characters of the Parts of
FRUCTIFICATION.

THE Parts of Fructification, with their Subdivisions, having been explained separately in the preceding Chapters, we shall here give a View of them altogether, with the proper distinguishing Character assigned to each by *Linnaeus*, beginning with the Vegetable itself.

The Essence of the *Vegetable* consists in its *Fructification*: The Essence of the *Fructification* consists in the *Flower* and *Fruit*: The Essence of the *Flower* consists in the *Antheræ* and *Stigma*: The Essence of the *Fruit* consists in the *Seeds*. We come now to THE PARTS.

POLLEN, is a Dust of Vegetables, designed to burst in a Liquor appropriated to that Purpose; and discharge therein, by its elastic Force, a Substance not distinguishable by the naked Eye.

C 2

A SEED,

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A *SEED*, is a deciduous Part of a Plant, fraught with the Rudiment of a new Plant, and quickened by the Pollen.

ANTHERA, is a Vessel that produces and discharges the Pollen.

PERICARPIUM, is a Vessel that produces and discharges the Seeds.

FILAMENTUM, is the Foot that supports the Anthera, and fastens it to the Vegetable.

GERMEN, is the Rudiment of the Pericarpium or of the Semen, not yet arrived at Maturity; its Existence is chiefly at the Time when the Anthera is discharging its Pollen.

STIGMA, is the moistened Summit of the Germen.

STYLUS, is the Foot of the Stigma, that connects it with the Germen.

COROLLA and *CALYX*, are the *Teguments* or *Covers* of the Stamina and Pistillum; the Calyx arising from the *cortical Epidermis*, or *outer Bark*, and the Corolla from the *Liber*, or *inner Bark*.

RECEPTACULUM, is that Part which connects the Parts before-mentioned.

From these Characters the following Principles may be deduced.

1. That

1. That every *Vegetable* is furnished with *Flower* and *Fruit*; there being no Species where these are wanting.

2. That there is no *Fructification* without *Anthera*, *Stigma*, and *Seed*.

3. That the *Antheræ* and *Stigma* constitute a *Flower*, whether the Covers are present or wanting.

4. That the *Seed* constitutes a *Fruit*, whether there be a *Pericarpium* or not.

In respect to the *Seed*; its Essence consists in the *Corculum*, which is fastened to the *Cotyledon*, and involved therein, and closely covered with its proper Tunic.

The Essence of the *Corculum* consists in the *Plumula*; which is the vital Speck of the Plant itself, extremely small in its Dimensions, but increasing like a Bud to Infinity. The *Rostellum* however must be included, being the Base of the *Plumula*, which descends and strikes Root, being the Part originally contiguous to the Mother Plant.

That the *Propagines*, or Seeds of Mosses, consist only of the *Plumula* and *Rostellum*, has been already shewn*.

* See Chap. 7.

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CHAP. X.

Of THE MOST NATURAL STRUCTURE of the Parts of FRUCTIFICATION.

IN considering the Structure of the Parts of Fructification, the principal Objects to be attended to are, 1. *The Number* of each Part. 2. *Its Figure*. 3. *Its Proportion*; by which is to be understood its Height in respect to the rest; and, 4. *Its Situation*; which will include also its *Insertion* and *Connections*. As to any other Differences, such as a Difference in the Size, Color, Smell, or Taste, it is not safe to allow any Weight to them, as they might lead us to make Distinctions, not justifiable by the true Principles of the Science.

As the Number, Figure, Proportion, and Situation of the Parts are variable, we shall consider; 1. **THE MOST NATURAL STRUCTURE**, or that which most frequently occurs; and this we shall make the Subject of the present Chapter. 2. **THE DIFFERENCES** in Structure, arising from the Variation of the Parts in different Plants; which will take up a few of the succeeding Chapters. And, 3. **THE SINGULAR STRUCTURES**, or such as are observed in a few Genera only; for which we shall allot a Chapter by itself.

The

The MOST NATURAL STRUCTURE of the Parts, in respect to *NUMBER*, is, To have the Calyx divided into as many Segments as the Corolla; The Filaments equal in Number to the Segments of the Corolla and Calyx; A single Anthera on each Filament; The Divisions of the Pistillum equal in Number to the Cells of the Pericarpium, or the Receptacles of the Seeds; the most common Number, *five*; (whence the Extent of the Classes *Pentandria* * and *Syngenesia* †,) and the Corolla and Calyx also *quinquifid, cut into five Segments*.

In respect to *FIGURE*, To have the Calyx less spreading than the Corolla; The Corolla widening gradually; The Stamina and Pistillum upright and tapering; The Pericarpium big with Seeds, swelling and extending after the rest of the Parts (the Calyx excepted) are fallen off.

In respect to *PROPORTION*, To have the Calyx less than the Corolla; The Pistillum of equal Length with the Stamina in an upright Flower, but longer in an inverted one; if the Flower slope downward, the Stamina and Pistillum inclining towards the under Side; but if it slope upwards, placed close under the upper Side.

* See Part II. Chap. 8. † See Part II. Chap. 22.

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In respect to *SITUATION*, To have the Perianthium surrounding the Receptacle; The Corolla placed on the Receptacle, and alternate with the Perianthium; The Filaments placed within the Corolla, but corresponding with the Perianthium; The *Antheræ* seated on the Tops of the Filaments; The Germen possessing the Centre of the Receptacle; The Style standing on the Top of the Germen; The Stigma seated on the Top of the Style. When the Stigma and Style are fallen, the Germen grows to a Pericarpium, supported by the Calyx, and including the Seeds which are affixed to the Receptacle of the Fruit. The Receptacle of the Flower is generally under the Pericarpium, being not so often found to grow either round it or over it.

CHAP. XI.

Of the different Structures of the CALYX.

HAVING shewn *the most natural Structure* of the Parts of the Fructification in the last Chapter, we come now to their DIFFERENCES, or Variations (which are the Foundation of the *Genera*) and their Cha-

Characters; and of these we shall treat in their Order, beginning with the *Calyx*.

The Variations of the *Calyx*, in respect to *NUMBER*, will take in the Terms also that respect its *Composition*, *Parts*, and *Segments*.

In respect to *Number*, it is either *single*, as in *Primula*, and most Flowers; *double*, as in *Malva*, *Hibiscus*, and *Bixa*; or *wanting*, as in *Tulipa*, *Fritillaria*, and many of the liliaceous Flowers.

In respect to *Composition*, it is either *Imbricate*, that is, composed of various Scales lying over each other, as in *Hieracium*, *Sonchus*, and *Camellia*; *Squarrose*, that is, composed of Scales divaricated on all Sides, and spreading widely open, as in *Carduus*, *Onopordum*, and *Conyza*; *Auctus*, *augmented*; that is, having a Series of distinct Leaves, shorter than its own, that surround its Base externally, as in *Coreopsis*, *Bidens*, *Crepis*, and *Dianthus*; or *Multiflorus*, *many flowered*, that is, common to many Florets, as in *Scabiosa*, and in the Plants of the Class *Syngenesia* *.

In respect to its *Parts*, it is either *Mono-phyllous*, *of one Leaf*, as in *Datura* and *Primula*; *Diphyllous*, *of two*, as in *Fumaria*, and

* See Part II. Chap. 22.

Fumaria bulbosa ; *Triphyllous*, of three, as in *Tradescantia* ; *Tetraphyllous*, of four, as in *Sagina*, *Epimedium*, and in the Plants of the Class *Tetradynamia* † ; *Pentaphyllous*, of five, as in *Cistus*, *Adonis*, and *Cerbera* ; *Hexaphyllous*, of six, as in *Berberis* ; or *Decaphyllous*, of ten, as in *Hibiscus*.

In respect to its *Segments* (which chiefly concern the monophyllous Calyx) it is either *Integer*, whole, as in *Genipa* ; *Bifid*, divided in two Segments, as in *Utricularia* ; *Trifid*, in three, as in *Alisma*, and *Cliffortia* ; *Quadrifid*, in four, as in *Rhinanthus* ; *Quinquifid*, in five, as in *Nicotiana* ; *Sexfid*, in six, as in *Pavia* ; *Octofid*, in eight, as in *Tormentilla* ; *Decemfid*, in ten, as in *Potentilla* and *Fragaria* ; or *Duodecemfid*, in twelve, as in *Lytbrum*.

The Variations of the Calyx in respect to *FIGURE*, will also include the Terms respecting its *Equality*, *Margin*, and *Apex*, or *Top*.

In respect to *Figure*, it is either *Globose*, *Globe-shaped*, as in *Cucubalus* ; *Clavate*, *Club-shaped*, as in *Silene* ; *Reflex*, bent back, as in *Asclepias* ; or *Erect*, upright, as in *Primula* and *Nicotiana*.

In respect to *Equality*, it is either *equal*, as in *Lychnis* ; *unequal*, as in *Helianthemum* ; or

† See Part II. Chap. 18.

with the Segments *alternately shorter*, as in *Tormentilla* and *Potentilla*.

In respect to its *Margin*, it is either *Integerrimus*, *very entire*, as in most Plants; *Serrate*, *sawed*, as in some Species of *Hypericum*; or *Ciliate*, *fringed with Hairs like an Eye-lash*, as in some Species of *Centaurea*.

In respect to its *Apex*, or *Top*, it is either *Acute*, *sharp*, as in *Primula* and *Androsace*; *Acuminate*, *pointed*, as in *Hyoscyamus*; *Obtuse*, *blunt*, as in *Nymphaea* and *Garcinia*; or with one of its Indents *lopped off*, as in *Verbena*.

In respect to *PROPORTION*, it is either *longer* than the Corolla, as in *Agrostema*, *Sagina*, and some Species of *Antirrhinum*; *equal* to it, as in some Species of *Cerastium*; or *shorter*, as in *Silene*.

In respect to *SITUATION*, it is either a Calyx of the *Flower*, as in *Linnæa* and *Morina*; of the *Fruit*, as in *Linnæa* and *Morina**, or of the *Fruetification*, as in *Pæonia*.

The *DURATION* of the Calyx may also be considered. In respect to which it is either *Caducous*, *falling off at the first Opening of the Flower*, as in *Papaver* and *Epimedium*; *Deciduous* with the Corolla, as in *Berberis*,

* The *Linnæa* and *Morina* have each of them two *Calyces*, one of the Flower, the other of the Fruit; which is the Reason of their being given as Instances of both Cases.

and

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and in the Plants of the Class *Tetradynamia* †; or *Persisting*, till the Fruit is come to Maturity, as in the Plants of the Class *Didynamia* ‡.

Variations of an INVOLUCRUM.

The preceding Varieties of the Calyx chiefly respect a Perianthium. An *Involucrum* is either *Monophyllous*, as in *Bupleurum*; *Diphyllous*, as in *Euphorbia*; *Triphyllous*, as in *Butomus* and *Alisma*; *Tetraphyllous*, as in *Cornus*; *Pentaphyllous*, as in *Daucus*; or *Hexaphyllous*, as in *Hæmanthus*.

Variations of a SPATHA.

A *Spatha* is either *Monophyllous*, as in *Narcissus*; *Diphyllous*, as in *Stratiotes*; or *Imbricate*, as in *Musa*.

C H A P. XII.

Of the different Structures of the COROLLA.

THE Variations of the Corolla in respect to *NUMBER* concern either *Petals*, or *Laciniaë*, *Segments*: The Varia-

† See Part II. Chap. 18. ‡ See Part II. Chap. 17.
tions

tions of the Nectarium shall be given separate.

The Corolla, in respect to its *Petals*, is either *Monopetalous*, or *consisting of one Petal*, as in *Convolvulus* and *Primula*; *Dipetalous*, of *two*, as in *Circæa* and *Commelina*; *Tripetalous*, of *three*, as in *Alisma* and *Sagittaria*; *Tetrapetalous*, of *four*, as in the Class *Tetradynamia* *; *Pentapetalous*, of *five*, as in umbelliferous Plants †; *Hexapetalous*, of *six*, as in *Tulipa*, *Lilium*, *Podophyllum*; *Enneapetalous*, of *nine*; as in *Thea*, *Magnolia*, and *Liriodendron*; or *Polypetalous*, of *many*, as in *Nymphæa*.

In respect to its *Laciniae* (which concern rather the *Monopetalous* than the *Polypetalous*, being but rarely observed in the latter) it has either *two*, as in *Alfina* and *Circæa*; *three*, as in *Holosteum* and *Hypecoum*; *four*, as in *Lychnis*; or *five*, as in *Reseda*.

The Variations of the Corolla, in respect to *FIGURE*, will include what also concerns its *Equality*, and its *Margin*.

In respect to *Figure*, it is either *Undulate*, *waved*, as in *Gloriosa*; *Plicate*, *folded*, as in

* See Part II. Chap. 18.

† The umbelliferous Plants are in the Order *Digynia* of the Class of *Pentandria*; see Part II. Chap. 8.

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Convolvulus; *Revolvute*, rolled back, as in *Asparagus* and *Medeola*; or *Tort*, twisted, as in *Nerium*, *Asclepias*, and *Vinca*: Its more considerable Variations, in respect to Figure, have been already shewn in Chap. 3.

In respect to *Equality*, it is either *equal*, as in *Primula*; *unequal*, as in *Butomus*; *regular*, as in *Aquilegia*; or *irregular*, as in *Aconitum* and *Lamium*.

In respect to its *Margin*, it is either *Crenate*, notched, as in *Linum*; *Serrate*, sawed, as in *Tilia* and *Alisma*; *Ciliate*, fringed, as in *Ruta*, *Menyanthes*, and *Tropæolum*; *Denticulate* between the Segments, that is, having a *Denticulus*, or little Jag, at the Bottom of the Divisions, as in *Samolus* and *Sideroxylum*; or with a *hairy Surface*, as in *Menyanthes*, and *Lasianthus* a Species of *Hypericum*.

In respect to *PROPORTION* it may be very long, as in *Catesbæa*, *Siphonanthus*, *Brunsfelsia* and *Craniolaria*; or very short, as in *Sagina*, *Centunculus* and *Ribes*.

In respect to *SITUATION*, the Base of the Corolla is usually close to the Perianthium, if there be one: It is indeed separated from it by the Germen, in *Adoxa*, *Sanguisorba* and *Mirabilis*; but these Instances are very rare.

In

In respect to *DURATION*, it is either *Persisting*, lasting till the Fruit is ripe, as in *Nymphæa*; *Caducous*, dropping as soon as the Flower is blown, as in *Actæa* and *Thalictrum*; *Deciduous*, dropping off with the Flower, which is the most common; or *Marcescent*, withering, but not falling, as in *Campanula*, *Orchis*, *Cucumis*, *Cucurbita* and *Bryonia*.

Variations of the NECTARIUM.

It has been already said, Chap. 3. that the Nectarium, by the former Botanists, had been confounded with the Petals; but tho' it commonly attends upon, and makes Part of the Corolla, it is often found distinct from it, as in the Instances of *Aconitum*, *Aquilegia*, *Helleborus*, *Isopyrum*, *Nigella*, *Garidella*, *Epimedium*, *Parnassia*, *Theobroma*, *Cherleria* and *Sauvagesia*; which sufficiently proves, that it should be distinguished from the Petals. The Nectarium affords very singular Varieties, especially if it grows distinct from the Petals. It admits of the following principal Distinctions.

CALCARIATE Nectaria, such as resemble a *Calcar*, or *Spur*; and these are either in *Monopetalous* Corollæ, as in *Antirrhinum*, *Valeriana*, *Pinguicula* and *Utricularia*;

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laria ; or in *Polypetalous*, as in *Orchis*, *Delphinium*, *Viola*, *Impatiens*, and *Fumaria*.

Neétaria that lie within the *SUBSTANCE* of the *Petals*, as in *Fritillaria*, *Lilium*, *Swer-tia*, *Iris*, *Hermannia*, *Uvularia*, *Hydrophyl-lum*, *Myosurus*, *Ranunculus*, *Bromelia*, *Ery-thronium*, *Berberis* and *Valisneria*.

Neétaria that *CROWN* the *Corolla*, as in *Passiflora*, *Narcissus*, *Pancratium*, *Ola-x*, *Lych-nis*, *Silene*, *Coronaria*, *Stapelia*, *Asclepias*, *Cy-nanchum*, *Nepenthes*, *Cherleria*, *Clusia*, *Hama-melis* and *Diosma*.

Neétaria of *SINGULAR Construction*, as in *Reseda*, *Cardiospermum*, *Amomum*, *Costus*, *Curcuma*, *Grewia*, *Urtica*, *Andrachne*, *Epi-dendrum*, *Helicteres* and *Salix*.

CALYCINE Neétaria, such as are found upon the *Calyx*, as in *Tropæolum*, *Monotropa*, *Biscutella* and *Malpighia*.

STAMINEOUS Neétaria, such as attend the *Stamina* ; and these are either upon the *Antheræ*, as in *Adenantha*; or upon the *Fi-laments*, as in *Laurus*, *Dictamnus*, *Zygophyl-lum*, *Commelina*, *Mirabilis*, *Plumbago*, *Cam-panula*, and *Roëlla*.

PISTILLACEOUS Neétaria, such as ac-company the *Pistillum* : These are upon the *Germen*, as in *Hyacinthus*, *Iris*, *Butomus*, *Chieranthus*, *Hesperis*, &c.

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RECEPTACULACEOUS Nectaria, such as join to the *Receptacle*, as in *Lathræa*, *Helxine*, *Collinsonia*, *Sedum*, *Cotyledon*, *Semper-vivum*, &c. *Mercurialis*, *Kiggellaria*, *Clusia*, *Phyllanthus*, *Melianthus* and *Diosma*.

C H A P. XIII.

Of the different Structures of the STAMINA.

THE Stamina consisting each of a Filament and an Anthera (see Chap. 4.) we shall speak first of the Variations of the Filaments.

As the Terms respecting the *NUMBER* of the Stamina will be explained in the Chapters that treat of the sexual System, we shall omit here what concerns the Number of the Filaments themselves, to avoid Repetition; but they are sometimes found to have *Laciniae*, *Segments*; and these are either *two*, as in *Salvia*; *three*, as in *Fumaria*; or *nine*, as in the Class *Diadelphia* *.

The *FIGURE* of the Filaments is either *Capillary*, like *Hairs*, as in *Plantago*; *Plane*,

* See Part II. Chap. 20.

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flat, as in *Ornithogalum*; *Cuneiform*, *Wedge-shaped*, as in *Thalictrum*; *Spiral*, *Skrew-shaped*, as in *Hirtella*; *Subulate*, *Awl-shaped*, as in *Tulipa*; *Emarginate*, *nicked* or *notched*, as in *Porrum*; *Reflex*, *bent back*, as in *Gloriosa*; or *Hirsute*, *hairy*, as in *Tradescantia* and *Anthericum*.

The *PROPORTION* of the Filaments is either *unequal*, as in *Daphne*, *Lychnis*, and *Saxifraga*; *irregular*, as in *Lonicera*, and the Class *Didynamia**; *very long*, as in *Trichostema*, *Plantago*, and *Hirtella*; or *very short*, as in *Triglochin*.

The *SITUATION* of the Filaments, is either *opposite* to the Leaves, or Segments of the Calyx, as in *Urtica*; or *alternate* with them, as in *Elæagnus*. In *Monopetalous* Flowers they are inserted into the Corolla, but scarce ever in *Polypetalous*: In the Class *Icosandria*† they are always inserted in the Calyx, as they are also in *Epilobium*, *Oenothera*, *Jussiaea*, *Ludwigia*, *Oldenlandia*, *Isnarda*, *Ammania*, *Peplis*, *Lytbrum*, *Glaux*, and *Rhexia*; and in some *Apetalous*‡ Flowers, as in *Elæagnus*; but it is more common for them to be inserted into the *Receptacle*, like the Calyx and Corolla.

* See Part II. Chap. 17. † See Part II. Chap. 15.

‡ Without Petals.

Variations of the ANTHERÆ.

The *NUMBER* of the Antheræ is either a *single* one to each Filament, as in the Generality of Plants; *one* common to *three*, as in *Cucurbita* *one* to *five*, as in the whole Class *Syngenesia* *; *two* to *each* Filament, as in *Mercurialis*; *three* to *each*, as in *Fumaria*; *five* to *three* Filaments, as in *Bryonia*; or *five* to *each*, as in *Theobroma*.

In some Plants that have single Antheræ to the Filaments, some of the Antheræ are *wanting*; thus *one* is wanting in *Cleome* and *Martynia*; *two* in *Pinguicula* and *Verbena*; *three* in *Gratiola*, and in some *Bignonias* and *Geraniums*; *four* in *Curcuma*; and *five* in *Pentapetes*, and some *Geraniums*.

The number of Cells that contain the Pollen, is either *one*, as in *Mercurialis*; *two*, as in *Helleborus*; *three*, as in *Orchis*; or *four*, as in *Fritillaria*.

The *FIGURE* of the Antheræ is either *Oblong*, as in *Lilium*; *Globose*, as in *Mercurialis*; *Sagittate*, *Arrow-shaped*, as in *Crocus*; *Angulate*, *cornered*, as in *Tulipa*; or *Cornute*, *horned*, as in *Hamamelis*, *Erica*, *Vaccinium*, and *Pyrola*.

* See Part II. Chap. 22.

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They *BURST* either on the *Side*, as in *Leucoium*, and most Flowers; on the *Apex*, as in *Galanthus* and *Kiggellaria*; or from the *Apex* to the *Base* through the whole Length, as in *Epimedium* and *Leontice*.

They are *FASTENED* either by their *Base*, as in most Plants; their *Tops*, as in *Colchicum*; their *Sides*, as in *Canna*; or grow to the *Nectarium*, as in *Costus*.

Their *SITUATION* is either on the *Tops* of the Filaments, as in most Plants; on the *Sides* of the Filaments, as in *Paris* and *Asarum*; on the *Pistillum*, as in *Aristolochia*; or on the *Receptacle*, as in *Arum*.

The *FIGURE* of the Particles of the Pollen appears by Glasses to be either *Globus echinatus*, a prickly Ball, as in *Helianthus*; *Perforate*, as in *Geranium*; *Double*, as in *Symphytum*; *Rotato-dentate*, *Wheel-shaped*, and *indented*, as in *Malva*; *Angulate*, *cornered*, as in *Viola*; *Reniform*, *Kidney-shaped*, as in *Narcissus*; or *Philyra Convoluta*, a Leaf rolled up, as in *Borago*.

C H A P.

C H A P. XIV.

Of the different Structures of the PISTILLUM.

THE Pistillum consists of three Parts, *Germen*, *Stylus*, and *Stigma*: Of these the *Germen* being no other than the Rudiment of the *Pericarpium*, its Variations will be considered under that Head in the next Chapter; nor need we speak here of the Number of the Styles, as that will be treated of in the Explanation of the sexual System*; but as the Style is often divided, we must consider its *Laciniaë*.

STYLE—The Style, in respect to its *LACINIAE*, is either *Bifid*, as in *Persicaria* and *Cornutia*; *Trifid*, as in *Clethra* and *Frankenia*; *Quadrifid*, as in *Rhamnus*; *Quinquesfid*, as in *Geranium*; or *Dichotomous*, halved, and each *Lacinia* halved again, as in *Cordia*.

The *FIGURE* of the Style is either *Cylindric*, like a rolling Stone, as in *Monotropa*; *Angulate*, cornered, as in *Canna*; *Subulate*, Awl-shaped, as in *Geranium*; *Capillary*, like

* See Part II. Chap. 3. in which the Titles of the Orders, which are governed chiefly by the Number of Styles, are explained.

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Hairs, as in *Ceratocarpus* ; or *thicker* towards the Top, as in *Leucoium*.

In respect to *LENGTH*, it is either *very long*, as in *Tamarindus*, *Cassia*, *Campanula*, *Scorzonera* and *Zea* ; *very short*, as in *Papaver* ; or of the Length of the *Stamina*, as in *Nicotiana*, and most Flowers.

In respect to *THICKNESS*, it is either *thicker* than the *Stamina*, as in *Leucoium* ; *thinner*, as in *Ceratocarpus*, or of *equal Thickness* with them, as in *Lamium*.

Its *SITUATION* is either on the *Apex* of the *Germen*, as is too common to need Example ; both *above* and *below* the *Germen*, as in *Capparis* and *Euphorbia* (unless the lower Part in these be considered as the Extension of the Receptacle ;) or on the *Side* of the *Germen*, as in *Rosa*, *Rubus*, and the rest of the Plants of the Order *Polygynia*, in the Class *Icosandria**, and also in *Hirtella* and *Suriana*.

As to its *DURATION*, it is sometimes *Perfisting*, as in the Class *Tetradynamia*†.

STIGMA—The *NUMBER* of the *Stigmata* is either a *single* one, as in most Flowers ; *two*, as in *Syringa* ; *three*, as in *Campanula* ; *four*, as in *Epilobium* and *Parnassia* ; or *five*, as in *Pyrola*.

* See Part II. Chap. 15. † See Part II. Chap. 18.

The *LACINIÆ* of the Stigma are either *Convolute*, rolled together, as in *Crocus*; *Capillary*, as in *Rumex*; *Revolute*, rolled back, as in *Dianthus*, *Campanula*, and in the Class *Syngenesia* †; or *bent to the Left*, as in *Silene*: And in respect to their *Number*, the Stigma may be *Sexpartite*, divided into six *Parts*, as in *Asarum*; or *Multifid*, with many *Divisions*, as in *Turnera*.

The *FIGURE* of the Stigma is either *Capitate*, beaded, as in *Tribulus*, *Hugonia*, *Vinca*, *Ipomœa*, and *Clesia*; *Globose*, *Globe-shaped*, as in *Primula*, *Hottonia*, *Linnœa*, and *Limosella*; *Ovate*, *Egg-shaped*, as in *Genipa*; *Obtuse*, blunt, as in *Andromeda*; *Truncate*, lopped, as in *Marranta*; *pressed down obliquely*, as in *Aetæa* and *Daphne*; *Emarginate*, notched, as in *Melica*; *Orbiculate*, rounded, as in *Lythrum*; *Peltate*, like a *Pelta*, or little *Shield*, as in *Sarracena*, *Nymphœa*, *Clusia*, and *Papaver*; *Coroniform*, *Crown-shaped*, as in *Pyrola*; *Cruciform*, *Cross-shaped*, as in *Penœa*; *Uncinate*, hooked, as in *Viola* and *Lantana*; *Canaliculate*, grooved or *channelled*, as in *Colchicum*; *Concave*, hollow, as in *Viola*; *Angulate*, cornered, as in *Muntingia*; *Striate*, streaked, as in *Papaver*; *Plumose*, feathery, as in *Rheum*, *Triglochin*,

† See Part II. Chap. 22.

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Tamarix, and in *Grasses*; or *Pubescent*, *downy*, as in *Cucubalus* and *Lathyrus*.

In respect to *LENGTH*, it may be *Fili-form*, *Thread-like*, as in *Zea*; or as *long* as the *Style*, as in *Genipa*.

In respect to *THICKNESS*, it may be *Foliaceous*, resembling a *thin Leaf*, as in *Iris*.

In respect to *DURATION*, it is either *Marcescent*, *withering*, as in most *Plants*; or *Persisting*, as in *Sarracena*, *Hydrangæa*, *Nymphæa* and *Papaver*.

CHAP. XV.

Of the different Structures of the PERICARPIUM.

THE Variations of the Pericarpium itself, in respect to *NUMBER*, arise properly from the Number of its Capsules, that is, the Number of Parts into which the Fruit is *externally* divided, the internal Divisions respecting the Loculaments.

In respect to external Division, the Pericarpium is either *absent*, as in the Order *Gymnospermia* of the Class *Didynamia**;

* See Part II. Chap. 18.

Unicapsular, consisting of one Capsule, as in *Lychnis*; *Bicapsular*, of two, as in *Pæonia* and *Asclepias*; *Tricapsular*, of three, as in *Veratrum* and *Delphinium*; *Quadricapsular*, of four, as in *Rhodiola*; *Quinquescapsular*, of five, as in *Aquilegia*; or *Multicapsular*, of many, as in *Caltha*, *Trollius* and *Helleborus*.

The Fruit in respect to the Loculaments, or internal Divisions of the Pericarpium, is either *Unilocular*, of one Cell, as in *Trientalis* and *Primula*; *Bilocular*, of two, as in *Hyoscyamus*, *Sinapis*, and *Nicotiana*; *Trilocular*, of three, as in *Lilium*; *Quadrilocular*, of four, as in *Euonymus*; *Quinquelocular*, of five, as in *Pyrola*; *Sexlocular*, of six, as in *Asarum* and *Aristolochia*; *Octolocular*, of eight, as in the Species of *Linum*, called *Radiola*; *Decemlocular*, of ten, as in *Linum*; or *Multilocular*, of many, as in *Nymphæa*.

The Pericarpium, in respect to the Number of its Valvules, or outer Inclosures, is either *Bivalve*, of two Valves, as in *Chelidonium* and *Brassica*; *Trivalve*, of three, as in *Viola*, *Polemonium* and *Helianthemum*; *Quadrivalve*, of four, as in *Ludwigia* and *Oenothera*; or *Quinquevalve*, of five, as in *Hottonia*.

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The *Dissepiments* are either *parallel* to the Valvules, as in *Lunaria* and *Draba* ; or placed the *contrary* Way, as in *Biscutella* and *Thlapsi*.

The most considerable Differences in the *FIGURE* of the Pericarpium, with the Names assigned for each, have been explained in Chap. 6. It varies farther, in being *Turbinate*, *narrowing like a Child's Top*, as in *Pyrus* ; *Inflate*, *puffed*, as in *Cardiospermum* and *Staphylæa* ; *Membranaceous*, *composed of thin Membranes*, as in *Ulmus* ; *Triquetrous*, *Tetragonous*, *Pentagonous*, of *three*, *four*, or *five* Sides, as in *Averrhoa*, *Zygophyllum*, &c. or *Articulate*, *jointed*, as in *Ornithopus*, *Hedysarum* and *Raphanus*.

The *OPENING* of the Pericarpium for discharging the Seeds when the Fruit is ripe, is either at the *Apex*, which may be *Quadridentate*, *split into four Segments*, as in *Dianthus* ; *Quinquedentate*, *into five*, as in *Alsine* ; or *Decemdentate*, *into ten*, as in *Cerastium* ; at the *Base* opening *Trisariam*, *into three Parts*, as in *Triglochin* and *Campanula* ; or *Quinquesariam*, *into five Parts*, as in *Ledum* ; at the *Angles*, *Corners*, *longitudinally*, *lengthways*, as in *Oxalis* and *Orchis* ; through a *Pore*, *Hole*, as in *Campanula* ; or *horizontally*
across

across the Middle, as in *Anagallis*, *Plantago*, *Amaranthus*, *Portulaca* and *Hyoscyamus*.

All Fruit that is *articulate*, *jointed*, opens at every one of the Joints, each of which is *Monospermous*, *single-seeded*.

The *CONFINEMENT* of the Seeds is sometimes *Elastic*, *bursting like a Spring*, as in *Oxalis*, *Elaterium*, *Momordica*, *Impatiens*, *Cardamine*, *Phyllanthus*, *Euphorbia*, *Justicia*, *Ruellia*, *Dictamnus*, *Hura*, *Ricinus*, *Tragia*, *Jatropha*, *Croton*, *Clusia* and *Acalypha*.

The *SITUATION* of the Pericarpium is at the Receptacle of the Flower, either placed *under* it, as in *Vaccinium* and *Epilobium*; *over* it, as in *Arbutus* and *Tulipa*; or both *above* and *below* it, as in *Saxifraga* and *Lobelia*.

C H A P. XVI.

Of the different Structures of the SEEDS.

IN respect to the *NUMBER* of Seeds contained within the Fruit, Plants are either *Monospermous*, *having one Seed*, as in *Polygonum* and *Collinsonia*; *Dispermous*, *two*, as in *Daucus*; *Trispermous*, *three*, as in *Euphorbia*; or *Tetraspermous*, *four*, as in *Tournefortia*.

In

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In respect to the Number of Loculaments of the Seed itself, it has but one in most Plants; but is *Bilocular*, with two Cells, in *Cornus*, *Xanthium*, *Locusta*, *Valeriana*, and *Cordia*.

In respect to its *FIGURE*, it is either *Cinct*, girt, as in *Arenaria* and *Bryonia*; *Cordiform*, Heart-shaped, as in *Medeola*; *Reniform*, Kidney-shaped, as in *Anacardium* and *Phaseolus*; *Ovate**, Egg-shaped, as in *Polygala* and *Isatis*; or *Echinata*, prickly like an *Echinus* or Hedge-hog, as in *Lappula*, a Species of *Myosotis*.

In respect to their *SUBSTANCE*, they are *Osseous*, bony, as in *Corylus*, *Lithospermum*, and *Nuts* of all kinds; or *Callous*, tough, as in *Citrus*.

The *CORONULA*, little Crown, that attends many Seeds, is either *Calyculus*, a small *Calyx* formed of the *Perianthium* of the Flower, as in *Scabiosa*, *Knautia*, *Ageratum* and *Arctotis*; or *Pappus*, a Down; and this *Pappus* is either *Capillary*, like a Hair, that is, *simple* and *filiform*; *Thread-shaped*, as in

* The Term *Ovate* is used to express an elliptical Figure when it is broader at one End than the other; and the Term *Oval* for the same Figure, when the Ends are alike.

Hieracium and *Sonchus*; *Plumose*, feathery, that is, *shaggy* and *compound*, as in *Crepis*, *Scorzonera*, and *Tragopogon*; *Paleaceous*, *chaf-fy*, as in *Bidens*, *Silphium*, *Tagetes*, and *Coreopsis*; or *wanting*, as in *Tanacetum*.

The Seed has an *ARILLUS* †, in *Coffea*, *Jasminum*, *Cynoglossum*, *Cucumis*, *Dictamnus*, *Diosma*, *Celastrus*, and *Euonymus*.

The Seeds in respect to *SIZE* may be *very small*, as in *Campanula*, *Lobelia*, *Trachelium*, and *Ammania*; or *very large*, as in *Coccus*.

In respect to *SITUATION*, they are either *Nidulantia*, *nesting*, that is, dispersed about the Pulp, as in *Nymphæa*; fastened to the *Suture*, as in Plants that are *siliquose*, *podded*; fastened to the *Columella*, as in *Malva*; or placed on *Receptacles*, as in *Nicotiana* and *Datura*.

The *HILUM* of the Seed is evident in *Cardiospermum* and *Staphylæa*.

The *CORCULUM* is close to the Hilum.

† See Chap. 7.

C H A P. XVII.

Of the different Structures of the RECEPTACLE.

IT is in the Class *Syngenesia**, which contains the compound Flowers, that the Varieties of the Receptacle are principally to be considered.

In respect to its *FIGURE*, it is either *Plane, flat*, as in *Achillea*; *Convex, rounding*, as in *Matricaria*; or *Conic, shaped like a Cone*, as in *Anthemis* and *Melampodium*.

In respect to its *SURFACE*, it is either *naked*, as in *Matricaria*; *Punctate, dotted*, as in *Tragopogon*; *Villose, shaggy*; as in *Andryala*; *Setose, bristly*, as in *Centaurea*; or *Paleaceous, chaffy*, as in *Hypochaeris* and *Anthemis*.

In some simple Flowers the Fruit has separate Receptacles, as in *Magnolia*, *Uvaria*, and *Michelia*.

* See Part II. Chap. 22.

C H A P. XVIII.

*Of the SINGULARITIES in the Structure
of the Parts of FRUCTIFICATION.*

BY a singular Structure of the Parts of Fructification, is to be understood such a one as is observed but in very few Genera; it is directly opposed to the natural Structure explained in Chap. 10. For Instances of this we may mention the *Arum*, whose Stamina are within the Pistilla; the *Adoxa*, whose Germen separates the Corolla from the Calyx; the *Salvia*, whose Filaments are *articulate, jointed*; the *Eriocaulon*, whose Stamina are placed on the Germen, and whose Corolla and Calyx are below the Germen; and the *Magnolia*, the Receptacle of whose Fruit is *capitate, beaded*, the Seeds, which are like Berries, hanging by a Thread out of the Capsule; but to take the Parts in their Order.

The *CALYX* is usually less colored than the *COROLLA*; but in the *American Bartzia* the Perianthium is bloody; in the herbaceous *Cornus* the Petals are black, but the Involucrum white; and in the *American Cornus*

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Cornus the Involucrum is red, and *Cordate*, *Heart-shaped*. In *Astrantia* the Involucrum is colored; and in *Palms* the Spathæ are bloody; where the Corolla is wanting, the Perianthium is wont to be more colored, especially when the Flowers are blowing, as in *Ornithogalum*, *Perficaria* and *Polygonum*; where either the Calyx or the Corolla is found to be less colored, the Leaves often take a Color, as in *Amaranthus tricolor*.

In most Plants the *STAMINA* and *PE-TALS* are inserted into the Receptacle, in the Bottom of the Flower; but the Plants of the Class *Icosandria* * have a monophyllous Calyx, the inner Side of which is girt with a Line, to which the Stamina and Petals are fastened; and the Calyx is also observed to support the Flowers in some other Plants, as in *Lythrum*, *Epilobium*, *Oenothera*, *Ammania*, *Isnarda*, *Peplis*, and *Elæagnus*. In some Plants the Receptacle is lined on all Sides with the Perianthium, and the Corolla adheres to the Perianthium as though it were glued to it; this is found in the *Cucurbitaceous* † Plants, such as *Cucurbita*, *Pasiflora*, *Fevillæa*, *Momordica*, *Trichosanthes*,

* See Part II. Chap. 15.

† So called from their Affinity to the *Cucurbita*.

Cucumis, *Bryonia*, *Sicyos*, *Melothria* and *Gronovia*; the same is also observed in *Cactus*: In some others there is a Receptacle that elevates the Pericarpium, as in *Passiflora*, *Capparis*, *Breynia*, *Arum*, *Calla*, *Dracontium*, *Pothos*, *Zostera*, *Nepenthes*, *Clusia*, *Helicteres*, and *Sisyrinchium*.

In monopetalous Flowers, the Stamina are usually inserted into the Petal, but they are separate from it in the *Plantæ Bicornes**, viz. in *Ledum*, *Azalea*, *Andromeda*, *Clethra*, *Erica*, *Myrsine*, *Memecylon*, *Santalum*, *Vaccinium*, *Arbutus*, *Royena*, *Diospyros*, *Melastoma*, and *Pyrola*; they are separate also in *Cissus* and *Aloe*. In polypetalous Flowers, the Stamina are usually separate from the Petals: But this also has a few Exceptions; for in the *Statice*, which is pentapetalous, the Filaments are inserted in the Claws of the Petals; in *Melanthium*, which is hexapetalous, they are inserted in the Petals; and in the *Lychnis*, which is pentapetalous, as also in *Saponaria*, *Cucubalus*, *Silene*, and *Agrostema*, which were formerly ranged with the *Lychnis*, every other Stamen is fastened to the Claws of the Petals.

* Having two Horns; these Plants have been so called from their bifid *Antheræ*.

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The *ANTHERÆ* are commonly placed on the Tops of the Filaments : But they stick close to the Sides of the Filaments in *Paris* and *Asarum*, and adhere to the Stigma without Filaments in *Aristolochia*.

The Singularities of the *NECTARIUM* have been already mentioned in Chap. 12.

The *PISTILLUM* is commonly placed within the *Antheræ* : But in the *Arum* there is this Singularity, that the Receptacle runs out into a Club, the Base of which is occupied by the Pistilla, and the upper Part by the Stamina ; so that here the Pistilla stand on the Outside of and surround the Stamina ; and in the *Calla* of *Ethiopia* these Parts are disposed in the same Manner. The *Rumex* is singular in the Infertion of its Stamina.

The *STYLE* is commonly placed on the Top of the Germen : Some Exceptions to this have been given in Chap. 14, to these may be added *Passerina*, *Gnidia*, *Struthia*, and *Stellaria*.

The *PERICARPIUM* is generally shut : But in *Reseda* and *Datisca* it is always open ; in *Parnassia* it gapes at the Time of Flowering, and closes afterwards.

That the Pericarpia are ever found one within another, the greater containing the smaller ones, *Linnaeus* refuses to admit ; for
although

although there is the Appearance of such a Singularity in *Magnolia*, *Uvaria*, and *Michelia*, he thinks the outer Pericarpium is in such Cases to be looked upon only as a common Receptacle.

Where the Pericarpium is a Berry, it is distinguishable into *proper* Berries, those which are formed of the Pericarpium; and *improper* or *singular*, such as are formed of any of the other Parts.

The Berry is improper or singular in the following Instances, *viz.* When it is a *Calyx*, as in *Blitum*, *Morus*, *Basella*, *Ephedra*, *Coix*, *Rosa* and *Coriaria*; a *Receptacle*, as in *Taxus*, *Rhizophora*, *Anacardium*, *Ochna*, *Laurus*, *Ficus*, *Dorstenia*, and *Fragaria*; a *Seed*, as in *Rubus*, *Magnolia*, *Uvaria*, *Michelia*, *Prasium*, *Uvularia*, *Panax*, *Adonis*, *Crambe*, and *Osteospermum*; an *Arillus*, as in *Euonymus* and *Celastrus*; a *Nectarium*, as in *Mirabilis*; a *Corolla*, as in *Adoxa*, *Poterium*, and *Coriaria*; a *Capsule*, as in *Euonymus*, *Androsæmum*, *Cucubalus* and *Epidendrum*; a *dry Berry*, as in *Linnæa*, *Galium*, &c. *Tetragonia*, *Myrica*, *Trientalis*, *Tropæolum*, *Xanthium*, *Juglans*, *Ptelea*, *Ulmus*, *Comarum*, *Amygdalus* and *Mirabilis*; a *Capsule* externally, as in *Dillenia*, *Clusia*, *Nymphæa*, *Capparis*, *Breynia*, *Morisonia*, *Stratiotes*, *Cyclamen*, and *Strychnus*; a

hollow Berry, as in *Staphylæa*, *Cardiospermum* and *Capficum*; a *Conceptacle*, as in *Actæa*; a *Legumen*, as in *Hymenæa*, *Cassia*, *Inga*, and *Ceratonia*; or a *Strobilus*, as in *Anona* and *Juniperus*.

The Berry does not naturally burst, being soft, and the Dispersion of the Seeds being designed to be by Means of Animals.

The Berries in the *Adonis* of the Cape are evidently *aggregate*, many united in one.

C H A P. XIX.

Of AGGREGATE Flowers.

COMPLETE Flowers are either simple or aggregate. Simple Flowers differ from aggregate in this, that they have not any Part of Fructification common to many Flowers, as is the Case with aggregate. Flowers are called aggregate, when many *Flosculi*, *Florets*, are, by the Mediation of some Part of the Fructification common to them all, so united, that no one of them could be taken out without destroying the Form of the whole, of which it was a Part. The common Part in aggregate Flowers is either the Receptacle or the Calyx. A partial

tial Flower of the aggregate one is called *Flosculus*, a *Floret*. Aggregate Flowers are primarily divisible into seven Kinds, viz. 1. The *Aggregate*, properly so called. 2. The *Compound*. 3. The *Umbellate*. 4. The *Cymose*. 5. The *Amentaceous*. 6. The *Glu-mose*. 7. The *Spadiceous*: All which we shall explain in their Turns.

1. An *AGGREGATE* Flower, properly so called, has a Receptacle that is *dilate, extended in Breadth*, the Florets standing on *Peduncles*, *Foot-stalks**, as in *Scabiosa*, *Knautia*, *Dipsacus*, *Cephalanthus*, *Globularia*, *Leucadendron*, *Protea*, *Brunia*, *Barreria*, and *Statice*.

2. A *COMPOUND* Flower† is an aggregate one, comprehending many Florets that are *sessile, squatted*, or without *Peduncles*, on a common Receptacle that is entire, and having also a common Perianthium, but furnished with Antheræ that grow together in the Form of a Cylinder.

The Properties of a compound Flower are. 1. A common Receptacle enlarged and undivided. 2. A common Perianthium, sur-

* *Peduncle* is the Foot-stalk of a Flower only; the Foot-stalk of a Leaf is called a *Petiole*.

† These are the Flowers of the Class Syngenesia, see Part II. Chap. 22.

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rounding all the Florets. 3. The Florets monopetalous and sessile. 4. The Antheræ of each Floret five in Number, and growing together in a Cylinder. 5. A monospermous Germen under each of the Florets. Of these Properties, the two last are essential to a compound Flower; but observe, that there are some whose Calyx contains only a single Floret, as *Echinops*, *Stoebe*, *Corymbium*, and *Artemisia*.

Compound Flowers are of three Kinds :

1. *Ligulate*, when all the *Corollulæ*, little *Corollæ*, of the Florets are *plane*, *flat*, shaped like *Ligula*, a narrow *Tongue*, or *Fillet*, and expanded towards the outer Side. 2. *Tubulose*, when all the *Corollulæ* of the Florets are *Tubulose*, and nearly equal. 3. *Radiate*, having *Rays*, when the *Corollulæ* of the *Disk*, *middle Parts*, are *Tubulose*, and those of the *Circumference*, *Margin*, of another Form : Which Variation affords three Cases, *viz.* when the *Corollulæ* of the *Circumference* are either *ligulate*, as in *Achillea*; *tubulose*, but unlike the tubulous Florets of the *Disk*, as in *Centaurea*; or *naked*, as in *Artemisia* and *Gnaphalium*. A compound Flower usually consists of many Florets, but rarely of a determinate Number of them.

3. An

3. An *UMBELLATE* Flower is an aggregate one, consisting of many Florets placed on a Receptacle, on fastigate Peduncles* that are all produced from the same Point: A *simple* Umbel is when the Receptacle is but once divided into Peduncles; a *compound* Umbel is when all the common Peduncles are subdivided into *Umbellulæ*, *little Umbells*; an *Umbellula* therefore is a *partial* Umbel.

Umbellate Flowers, properly so called†, have the following Properties. 1. A common Receptacle divided into Peduncles in the manner above-mentioned, whether the Umbel produced be *plane*, *flat*; *convex*, *rounding*; or *concave*, *hollow*. 2. A Germen under the Corollula. 3. Five distinct Stamina that are deciduous. 4. A bifid Pistillum. 5. Two Seeds joined at their Summits.

A *Radiate* Umbel is when the marginal Petals are larger than those of the Disk, as in *Tordylium*, *Caucalis*, *Coriandrum*, *Ammi*, and some Species of *Heracleum*; an Umbel may vary also in having the Flowers of the

* See the first Note in Chap. 8.

† The umbellate Flowers, properly so called, belong to the Order Digynia of the Class Pentandria; see Part II. Chap. 8.

Margin differing in Sex from those of the Disk, as in *Astrantia*, *Caucalis*, *Artemisia*, *Oenanthe* and *Scandix*. The *Involucrum* varies, in being either *Tetraphyllous*, of four Leaves, as in *Hydrocotyle*, *Sison*, and *Cuminum*; *Pentaphyllous*, of five, as in *Bupleurum*, *Scandix*, and *Bubon*; *Heptaphyllous*, of seven, as in *Ligusticum*; *Decaphyllous*, of ten, as in *Artemisia*: With the *partial Involucrum* *dimidiate*, halved, going but half round, as in *Æthusa*, *Coriandrum*, and *Sanicula*; or *Caducous*, falling off, as in *Ferula* and *Heracleum*.

4. A *CYMOSE* Flower is an aggregate one, of many Florets, placed on a Receptacle upon fastigate* Peduncles, the primary ones of which issue from the same Center as in an Umbel; but the secondary, or partial ones, lie dispersed without Order; which Circumstance distinguishes the Cyma from the Umbel, as in *Opulus*, *Ophiorrhiza*, and the Species of *Cornus* called *Virga sanguinea*, or *Bloody-rod*.

5. An *AMENTACEOUS* aggregate Flower has a *Filiform*, *Thread-shaped* Receptacle, along which are disposed *amentaceous Squamæ*, *Scales* that form an *Amentum* or *Catkin*, as in *Xanthium*, *Ambrosia*, *Par-*

* See the first Note on Chap. 8.

thenium,

thenium, Iva, Alnus, Betula, Salix, Populus, Corylus, Carpinus, Juglans, Fagus, Quercus, Liquidambar, Cynomorion, Ficus, Dorstenia, Parietaria, Urtica, Pinus, Abies, Cupressus, Thuya, Juniperus, Taxus, and Ephedra.

6. A *GLUMOSE* aggregate Flower has a filiform Receptacle, the Base of which is furnished with a common *Glume, Husk*, as in *Bromus, Festuca, Avena, Arundo, Briza, Poa, Aira, Uniola, Cynosurus, Melica, Elymus, Lolium, Triticum, Secale, Hordeum, Scirpus, Cyperus*, and *Carex*.

7. A *SPADICEOUS* aggregate Flower is, when there is a Receptacle common to many Florets placed within a Spatha or Sheath; such a Receptacle is called a *Spadix*, and is either *Branched*, as in Palms, or *Simple*: In this last Case the Florets may be disposed either all round it, as in *Calla, Dracontium*, and *Pothos*; on the lower Part of it, as in *Arum*; or on one Side of it, as in *Zosteræ*.

CHAP. XX.

Of LUXURIANT Flowers, commonly called
DOUBLE.

A Flower is said to be luxuriant, when some of the Parts of Fructification are augmented in Number, and others thereby excluded. The Luxuriancy is commonly owing to the Luxuriancy of its Nourishment; the Part multiplied is usually the Corolla, but sometimes the Calyx also; and by this Increase of the Covers, the essential Parts of Fructification are destroyed. Luxuriant Flowers are divisible into, 1. *Multiplicate, multiplied.* 2. *Pleni, full.* And, 3. *Proliferous, producing Young*; to which may be added, 4. *Mutilate, maimed*; such as are deficient in some Part, which stand opposed to the luxuriant ones: All these shall be explained in their Order.

1. Flowers are said to be *MULTIPLICATE*, when by the Increase of the Corolla only a Part of the Stamina are excluded; and this distinguishes them from the *Flores Pleni, full Flowers*, in which the Multiplication of the Corolla is so great as to exclude them all. Multiplicate Flowers
are

are distinguished into *Duplicate*, *Triplicate*, *Quadruplicate* &c. that is, having a *double*, *treble*, or *quadruple* Series or Row, according to the Number of the Repetitions of the Corolla. The *Polypetalous* Flowers are the most subject to Multiplication; the *Mono-petalous* are multiplied likewise, but it is very uncommon to meet with them full. A *colored Perianthium*, though it may have the Appearance of a Repetition of the Corolla, ought not to be considered as such; for though this Appearance is in some Degree *monstrous*, *unnatural*, it is no Multiplication.

2. A Flower is said to be *PLENUS*, *full*, when the Corolla is so far multiplied, as to exclude all the Stamina, as was before observed. The *Plenitude*, *Fullness*, is occasioned by the Stamina running into Petals, with which the Flower is so crowded as frequently to choak the Pistillum also. The Parts essential to Generation being thus destroyed in full Flowers, it is evident they must be barren; wherefore no good Seed is to be expected from them*. And for the same Reason of their Imperfection, we should be

* Some few, as *Papaver* and *Nigella*, perfect their Seed: But these are rather multiply Flowers than full ones.

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cautious also of constituting a Genus from them ; for the Characters of a Genus should be drawn from the Parts when in their natural State, and not when in a State of Luxuriancy.

Plenitude is chiefly incidental to polypetalous Flowers, as in *Malus*, *Pyrus*, *Perfica*, *Cerasus*, *Amygdalus*, *Myrtus*, *Rosa*, *Fragaria*, *Ranunculus*, *Caltha*, *Hepatica*, *Anemone*, *Aquilegia*, *Nigella*, *Papaver*, *Pæonia*, *Dianthus*, *Silene*, *Lychnis*, *Coronaria*, *Lilium*, *Fritillaria*, *Tulipa*, *Narcissus*, *Colchicum*, *Crocus*, *Cheiranthus*, *Hesperis*, *Malva*, *Alcea*, and *Hibiscus*.

Plenitude of monopetalous Flowers is by some Authors held a Contradiction ; but this cannot be granted ; for there are Instances of it in *Colchicum*, *Crocus*, *Hyacinthus*, and *Polianthes* : However, it is rare that their Luxuriancy passes Duplicity. When they are filled, it is by the Multiplication of the *Lacinia*, *Segments* ; whereas the Polypetalous are usually filled by the Multiplication of the Petals ; but the Manner in which the *Impletion*, *filling*, is brought about, must be more particularly considered.

The Impletion is either in simple or compound Flowers ; we shall begin with the Simple.

The

The Impletion of *SIMPLE* Flowers, is by the Increase either of the Petals, or of the Nectarium. The Impletion of the *Aquilegia* is observed to be after three different manners, *viz.* either, 1. By multiplying its Petals, and excluding the Nectaria : 2. By multiplying its Nectaria, and excluding its Petals : Or, 3. By multiplying its Nectaria, and retaining its Petals ; in which last Case the five Petals remain, and the Spaces between them are each of them filled up with a triple Case of Nectaria, that is, three Nectaria buried one within another.

The Impletion of the *Nigella* is by multiplying the Nectaria only ; that of the *Narcissus* two Ways, by multiplying either the Nectarium only, or both Nectarium and Petals ; that of *Delphinium*, for the most Part, by multiplying the Petals, and excluding the Nectarium : The Change wrought in the *Saponaria Anglicana* is remarkable, the Flower from Pentapetalous becoming truly Monopetalous ; and the Alteration in the *Peloria* is also very singular*. But the

* The *Peloria* is a Plant which has been found in some Parts of *Sweden*, growing amongst the Species of *Antirrhinum* called *Linaria*. It resembles the *Linaria* so nearly, in every thing but the Flower, that they are not to be known one from the other, till their Flowers appear ; and even in the Flowers they agree in the Calyx,
most

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most extraordinary Instance of Plenitude is that of the *Opulus flore globoso*, commonly called the *Gelder Rose*. In the common simple *Opulus*, the Flowers are produced on a Cyma, which consists of a great Number of *Campanulate*, *Bell-shaped*, Hermaphrodite Flowers in the Disk, and of others in the Circumference, whose Corollæ are larger, flat, and Wheel-shaped, and that are barren, wanting the *Pistillum*. But in the *Opulus flore globoso*, all the Flowers of the Disk are barren also, and shaped like those of the Circumference; so that the Impletion here arises only from the additional Number of barren Flowers, the Corollæ of which are of a larger Size; and in this it resembles the Impletion of the compound Flowers, of which we shall presently speak.

Pericarpium and Seeds, and also in Color: which has given Rise to a Supposition, that the *Peloria* is only a *Linaria* in a monstrous State; see the Dissertation of *Daniel Rudberg* on the *Peloria* in the *Amœnitates Academicæ*, Vol. I. p. 280. But as the *Linaria* and *Peloria* differ so widely in their Corollæ and Stamina, that the former must be referred to the Class *Didynamia*, and the latter to the Class *Pentandria*, the *Peloria* cannot be supposed to derive its Origin from the *Linaria*, without overturning the fundamental Principles of the Science: And therefore till more Instances can be produced of this kind of Irregularity in Nature, the *Peloria* cannot with Safety be considered otherwise, than as a Genus distinct from that of *Antirrhinum*.

Before

Before we leave the simple Flowers, it will be of Use to remark, that a simple Flower, in a State of Luxuriancy, may in all Cases be distinguished from a compound One in its natural State, by this Rule; That in *simple* Flowers, how much soever multiplied, there is but one Pistillum in the Center of the Flower, common to the whole Multiplication; whereas in *compound* Flowers, each of the Florets is furnished with its own Pistillum and Stamina.

We come now to the Impletion of *COMPOUND* Flowers; that these are of three kinds, *Ligulate*, *Tubulose*, and *Radiate*, has been shewn and explained in Chap. 19. where it has also been seen, that there is not either in the *Ligulate* or *Tubulose* any Distinction of Disk or Radius, all the Florets in these being alike; but that the contrary is the very Characteristic of the *Radiate*; now this being attended to, the manner of the Impletion will be easily understood. Compound Flowers gain their Impletion two Ways, either by the Radius, or the Disk. We shall begin with the first.

Impletion by the *Radius* is when, by the Multiplication of the Radius, the Disk of the Flower is filled up: as in *Helianthus*, *Calendula*, *Chrysanthemum*, *Anthemis*, *Matricaria*,

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caria, *Ptarmica*, *Tagetes*, and the Species of *Centaurea* called *Cyanus*. In this Sort of Impletion, which belongs only to radiate Flowers, it is observable, that all the Florets which fill up the Disk follow the Conditions of those of the Radius; so that if the Florets of the Radius in the natural Flower have a Pistillum, all those of the full Flower will have one also, as in *Matricaria*, *Bellis*, *Chrysanthemum* and *Tagetes*; or if they have no Pistillum, then it will also be wanting in the full one, as in *Helianthus*, *Calendula* and *Centaurea*; and the same holds true of the male Part also; for as the Florets of the Radius in the natural Flower are never furnished with Antheræ, so these are wanting also in all those of the full ones. This last Remark is of great Use to distinguish a Radiate full Flower, from a Ligulate natural one; which might be confounded in many Cases, were we not apprized, that there are Antheræ in the latter, but none in the former; by this Rule, in *Chrysanthemum*, *Helianthus*, *Calendula*, and *Tagetes*, when the Disk is destroyed by the Multiplication of the Radius, we know by the Defect of Antheræ, that it is only the Luxuriancy of a radiate Flower, as in *Hieracium*, *Leontodon*, and *Sonchus*; by the Presence of the Antheræ

theræ we know the Flowers to be ligulate and natural.

Impletion by the *Disk* is, when there is no Multiplication of the Radius; but the Corollulæ of the Disk run out into Length, and have their Brims less divided: This manner of Impletion seems to concern only the *Radiate* and the *Tubulose**. In the *Radiate*, it will so far affect the Radius, as to change its Flowers from Ligulate to Tubulose: Instances of this manner of Impletion may be had in *Bellis*, *Matricaria*, and *Tagetes*. In the *Carduus* of the Oats, which is a Species of *Serratula*, the Corollulæ are both lengthened and enlarged. In respect to the *Ligulate* Flowers, if we confine ourselves to the two-fold manner of Impletion, after the Author whose Divisions we have adopted, we shall be obliged to call their Impletion also, an Impletion by the Disk; though the Manner of it differs from that last explained, and the Expression does not so well answer to Flowers, that in the Botanical Sense of the Term have properly no Disk at all. But not to stop at two great Niceties, their

* This is not expressly asserted, as the Distinction is omitted, in the *Philosophia Botanica* of *Linnaeus*; but it appears to be his Meaning, by his speaking of the Impletion of ligulate Flowers separately afterwards.

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Impletion is by the lengthening of their Stigmata, and the enlarging and diverging of their Germina ; by which Augmentations, the full Flowers are to be distinguished from the natural ones, as in *Scorzonera* and *Lapsana vulgaris* ; which last, *Linnaeus* tells us, is frequently found with a full Flower at *Upsal*.

3. Flowers are said to be *PROLIFEROUS*, when one Flower grows out of another : This generally happens in full Flowers, the Fulness being the Cause of their becoming prolific. Prolification is after two Manners ; 1. From the Center ; 2. From the Side.

Prolification from the *Center*, which happens in simple Flowers, is, when the Pistillum shoots up into another Flower, standing on a single Peduncle ; of which there are Instances in *Dianthus*, *Ranunculus*, *Anemone*, *Geum*, and *Rosa*.

Prolification from the *Side*, which happens in aggregate Flowers, properly so called (see Chap. 19.) is, when many pedunculate Flowers are produced out of one common Calyx ; of which there are Instances in *Bel-lis*, *Calendula*, *Hieracium*, and *Scabiosa*.

In *umbellate* Flowers, the Prolification is by the Encrease of the Umbellulæ, one simple

ple Umbellula producing another, as in *Corrus* and *Periclymenum*; and in this manner compound Umbels will become *supradecom-pound, more than compounded a second Time*, as in *Selinum* and *Thyffelinum*.

A prolific Flower is called *Frondose**, leafy, when it produces Leaves; this rarely happens, but Instances of it have been found in *Rosa*, *Anemone*, and others: The other Kinds of Prolification are frequent enough.

4. *MUTILATE* Flowers are the Reverse of Luxuriant. *Linnaeus* confines the Term to those Flowers only that want the Corollæ, though they ought to be furnished with it; which often happens in *Ipomœa*, *Campanula*, *Ruellia*, *Viola*, *Tussilago* and *Cucubalus*: The Cause of this Defect he ascribes chiefly to the want of sufficient Heat.

* *Frons*, with the Ancients (tho' frequently used, in respect to Trees, in the same Sense with *Folium*, a Leaf) implied, in its proper Signification, a Part of the Wood of the Tree with the Leaf; or, as we should express it, a *Twig with Leaves*; and for this Reason they never applied the Term to the Leaves of Herbs (which were always called *Folia*) but only to those of Trees. *Linnaeus* has availed himself of this old Distinction to make it a botanical Term; which he applies to express the Circumstance of *Palms* and *Filices*, *Ferns*; in the former of which the Branches, and in the latter even the Stem itself is an actual Leaf: And here again he applies it to the leafy Prolification in Question, calling it *Frondose*, rather than *Foliaceous*, for the like Reason.

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The Luxuriancy of the *Calyx*, mentioned in the Beginning of this Chapter, is very infrequent, but not without Instances; in *Dianthus Caryophyllus* there is a Variety, in which the *Squamæ*, *Scales*, of the Calyx are so multiplied as to constitute a perfect Spike in a manner most singular: The *Gramina*, *Grasses*, of the Alps, become full by their *Glumæ*, *Husks*, shooting out into Leaves, as in a Species of the *Festuca*; and in *Salix rosea*, and *Plantago rosea*, the *Squamæ* of the Amentum of the former, and the Bractæ* of the Spike in the latter will shoot into Leaves also.

Linnaeus has enumerated some Tribes of Plants, which are not found subject to Luxuriancy; but as the Heads, under which he has ranged them, are taken from the Systems of preceding Writers, and not from the Sexual, it would perplex the Reader to explain them; and we shall therefore omit them: The Curious may have Recourse to them in the *Philosophia Botanica*, Page 81.

* Floral Leaves.

C H A P.

C H A P. XXI.

Of the SEX of Plants.

THE Distinction of Flowers into Male, Female, Hermaphrodite, and Neuter, has been already explained in Chap. 4. To which we must add, that Hermaphrodite Flowers are sometimes distinguishable into *Male* Hermaphrodites, and *Female* Hermaphrodites : This is, when, although the Flower contains the Parts belonging to each Sex, one of them proves abortive or ineffectual ; if the Defect be in the *Stamina*, it is a *Female* Hermaphrodite ; if in the *Pistillum*, a *Male* one. The Case wherein this Distinction becomes necessary, happens very rarely : It will be shewn in the Course of this Chapter.

Plants, in respect to Sex, take their Denominations from the Sex of their Flowers in the manner following.

1. *HERMAPHRODITE* Plants are such as upon the same Root bear Flowers, that are all Hermaphrodite, as in most Genera.

2. *ANDROGYNOUS*, *Male* and *Female*, such as upon the same Root bear both male

and female Flowers, as in the Class *Monoecia**.

3. *MALE* such as upon the same Root bear male Flowers only, as in the Class *Dioecia*†.

4. *FEMALE*, such as upon the same Root bear female Flowers only, as in the Class *Dioecia*.

5. *POLYGAMOUS*‡, such as either on the same, or on different Roots bear Hermaphrodite Flowers, and Flowers of either or of both Sexes, as in the Class *Polygamia*§.

Of Plants that are Polygamous on the same Root, there are three Cases: 1st, *Male Hermaphrodite*, and *Female Hermaphrodite* Flowers; which is a very rare Case, but is observed in *Musa*. 2d, *Hermaphrodite*||, and *Male* Flowers, as in *Veratrum*, *Celtis*, *Ægiops*, and *Valantia*. 3d, *Hermaphrodite* and *Female* Flowers, as in *Parietaria* and *Atriplex*.

* See Part II. Chap. 24.

† See Part II. Chap. 25.

‡ See the Signification of this Term explained in the Account of the Title of the Class *Polygamia*, in Part II. Chap. 26. These Plants are by some called *Hybrid*, *Mongrel*.

§ See Part II. Chap. 26.

|| In the *Philosophia Botanica*, the Hermaphrodite Flowers of this Class are put down *Hermaphroditæ*, *Female Hermaphrodite*; but the Instances shew it to be a Mistake.

Of such as are Polygamous on *two* distinct Roots, the Cases are four; 1st, *Hermaphrodite** Flowers and *Male*, as in *Panax*, *Nyssa*, and *Diospyros*. 2. *Hermaphrodite* Flowers and *Female*, as in *Fraxinus*. 3d, *Hermaphrodite*† Flowers and both *Male* and *Female*, as in *Gleditsia*‡. 4th, *Androgynous* || and *Male*, as in *Arctopus*. Of Plants that are Polygamous on *three* distinct Roots there is but one Case, viz. *Androgynous*, *Male* and *Female*, as in *Ficus* §.

* *Hermaphroditæ*, again in *Phil Bot*.

† *Hermaphroditæ* again.

‡ In the *Gleditsia*, which is the only known Instance of this Case, the male Flowers and the Hermaphrodites are produced upon the same Plant, and the Females on a distinct one.

|| This Case and the next, having no Hermaphrodite Flowers, seem to be Exceptions to the Definition of Polygamous Plants.

§ The Instance of this Case given in the *Philosophia Botanica* is the *Empetrum*; but that Genus is removed to the Class *Dioecia* in the last Edition of the *Genera Plantarum*; where a Note informs us, that the Hermaphrodite Flowers, which the Author had once seen on a Plant of this Genus, could not afterwards be ever found again. We have therefore changed this Instance for the *Ficus*, the only other Instance left of this singular Case.

AN
INTRODUCTION
TO
BOTANY.

PART THE SECOND.

CHAP. I.

*Of the SEXUAL SYSTEM, and its
Divisions.*

THE Sexual System was invented by Dr. *Linnæus*, Professor of Physic and Botany at *Upsal*. It is founded on the Parts of Fructification described in the former Part of this Work; These having been observed with more Accuracy, since the Discovery of the Uses for which Nature has assigned them, a new Set of Principles have been derived from them; by means of which,

which, the Distribution of Plants has been brought to a greater Precision, and rendered more conformable to true Philosophy in this System, than in any one of those which preceded it. The Author of it does not pretend to call it a natural one; he gives it as artificial only, and modestly owns his Inability to detect the Order pursued by Nature in her vegetable Productions: But of this he seems confident, that no natural System can ever be framed, without taking in the Materials, out of which he has raised his own; and urges the necessity of admitting artificial Systems for Convenience, till one truly natural shall appear*.

By the Sexual System, Plants are disposed according to the Number, Proportion, and Situation of the Stamina and Pistilla: The Manner of their Distribution will appear in the following Chapters. We shall here only speak in general of the Divisions of the System.

* *Linnaeus* has given *Fragmenta Methodi naturalis*, *Fragments of the natural Method*, in which he has made a Distribution of Plants under various Orders, putting together in each, such as appear to have a natural Affinity to each other: This, after a long and fruitless Search after the natural Method, he gives as the Result of his own Speculation, for the Assistance of such as may engage in the same Pursuit. See his *Classes Plantarum*, page 485. and *Phil. Bot.* page 27.

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The first general Division of the whole Body of Vegetables is into twenty-four *Classes*; these are again subdivided into *Orders*, the Orders into *Genera*, the Genera into *Species*, and the Species into *Varieties*, where there are any worthy of Note. Of these Divisions, we shall treat of the three first only in this second Part. These more immediately respect the Theory of the Science than the other two, which, tho' systematic Divisions likewise, have, as our Author observes, a nearer Relation to the Practice; and it is in these also that the principal Improvements in the Management of the Science are more particularly included.

As the Classes and Orders of the System will be separately treated of in the following Chapters, we shall conclude this Introductory one with a Table exhibiting their Titles at one View, in the Order in which they stand in the System that the Reader may have Recourse thereto as he finds Occasion.

Table

Table of the CLASSES and Orders.

CLASSES. ORDERS.

1. MONANDRIA	1. <i>Monogynia</i> . 2. <i>Digynia</i> .
2. DIANDRIA	{ 1. <i>Monogynia</i> . 2. <i>Digynia</i> . 3. <i>Trigynia</i> .
3. TRIANDRIA	{ 1. <i>Monogynia</i> . 2. <i>Digynia</i> . 3. <i>Trigynia</i> .
4. TETRANDRIA	{ 1. <i>Monogynia</i> . 2. <i>Digynia</i> . 3. <i>Tetragynia</i> .
5. PENTANDRIA	{ 1. <i>Monogynia</i> . 2. <i>Digynia</i> . 3. <i>Trigynia</i> . 4. <i>Tetragynia</i> . 5. <i>Pentagynia</i> . 6. <i>Polygynia</i> .
6. HEXANDRIA	{ 1. <i>Monogynia</i> . 2. <i>Digynia</i> . 3. <i>Trigynia</i> . 4. <i>Tetragynia</i> . 5. <i>Polygynia</i> .
7. HEPTANDRIA	{ 1. <i>Monogynia</i> . 2. <i>Digynia</i> . 3. <i>Tetragynia</i> . 4. <i>Heptagynia</i> .
8. OCTANDRIA	{ 1. <i>Monogynia</i> . 2. <i>Digynia</i> . 3. <i>Trigynia</i> . 4. <i>Tetragynia</i> .
9. ENNEANDRIA	{ 1. <i>Monogynia</i> . 2. <i>Trigynia</i> . 3. <i>Hexagynia</i> .
10. DECANDRIA	{ 1. <i>Monogynia</i> . 2. <i>Digynia</i> . 3. <i>Trigynia</i> . 4. <i>Pentagynia</i> . 5. <i>Decagynia</i> .
11. DODECANDRIA	{ 1. <i>Monogynia</i> . 2. <i>Digynia</i> . 3. <i>Trigynia</i> . 4. <i>Pentagynia</i> . 5. <i>Dodecagynia</i> .
12. ICOSANDRIA	{ 1. <i>Monogynia</i> . 2. <i>Digynia</i> . 3. <i>Trigynia</i> . 4. <i>Pentagynia</i> . 5. <i>Polygynia</i> .
	13. Po-

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CLASSES. ORDERS.

13. POLYANDRIA	{	1. <i>Monogynia</i> . 2. <i>Digynia</i> . 3. <i>Trigynia</i> . 4. <i>Tetragynia</i> . 5. <i>Pentagynia</i> . 6. <i>Hexagynia</i> . 7. <i>Polygynia</i> .
14. DIDYNAMIA	{	1. <i>Gymnospermia</i> . 2. <i>Angiospermia</i> .
15. TETRADYNAMIA	{	1. <i>Siliculosa</i> . 2. <i>Siliquosa</i> .
16. MONADELPHIA	{	1. <i>Pentandria</i> . 2. <i>Decandria</i> . 3. <i>Endecandria</i> . 4. <i>Dodecandria</i> . 5. <i>Polyandria</i> .
17. DIADELPHIA	{	1. <i>Pentandria</i> . 2. <i>Hexandria</i> . 3. <i>Octandria</i> . 4. <i>Decandria</i> .
18. POLYADELPHIA	{	1. <i>Pentandria</i> . 2. <i>Icosandria</i> . 3. <i>Polyandria</i> .
19. SYNGENESIA	{	1. <i>Polygamia æqualis</i> . 2. <i>Polygamia superflua</i> . 3. <i>Polygamia frustranea</i> . 4. <i>Polygamia necessaria</i> . 5. <i>Polygamia segregata</i> . 6. <i>Monogamia</i> .
20. GYNANDRIA	{	1. <i>Diandria</i> . 2. <i>Triandria</i> . 3. <i>Tetrandria</i> . 4. <i>Pentandria</i> . 5. <i>Hexandria</i> . 6. <i>Decandria</i> . 7. <i>Dodecandria</i> . 8. <i>Polyandria</i> .
21. MONOECIA	{	1. <i>Monandria</i> . 2. <i>Diandria</i> . 3. <i>Triandria</i> . 4. <i>Tetrandria</i> . 5. <i>Pentandria</i> . 6. <i>Hexandria</i> . 7. <i>Heptandria</i> . 8. <i>Polyandria</i> . 9. <i>Monadelphia</i> . 10. <i>Syngenesia</i> . 11. <i>Gynandria</i> .
		22. DIO-

CLASSES. ORDERS.

	{	1. <i>Monandria</i> . 2. <i>Diandria</i> .
		3. <i>Triandria</i> . 4. <i>Tetrandria</i> . 5. <i>Pentandria</i> . 6.
		<i>Hexandria</i> . 7. <i>Ostendria</i> .
22. <i>DIOECIA</i>	{	8. <i>Enneandria</i> . 9. <i>Decandria</i> . 10. <i>Dodecandria</i> .
		11. <i>Polyandria</i> . 12. <i>Monadelphbia</i> . 13. <i>Syngenesia</i> .
		14. <i>Gynandria</i> .
23. <i>POLYGAMIA</i>	{	1. <i>Monoecia</i> . 2. <i>Dioecia</i> . 3.
		<i>Trioecia</i> .
24. <i>CRYPTOGAMIA</i>	{	1. <i>Filices</i> . 2. <i>Musci</i> . 3. <i>Algæ</i> .
		4. <i>Fungi</i> .
APPENDIX		1. <i>Palmeæ</i> .

CHAP. II.

Explanation of the TITLES of the Twenty-four CLASSES.

HAVING in the preceding Chapter given the Divisions of the System, we shall in this explain the Meaning of the Terms used for the Titles of the Classes. As these Terms in the *Greek Language*, from whence they are taken, are all expressive of the principal Circumstance that obtains in the Class to which they are applied, the Explanation of them will itself give us a good insight into the proper Characters of the several Classes, and the sexual Distinctions on which they are founded : However, it will be necessary to say something more particular concerning many of them afterwards in the Chapters we shall allot for each of them separately.

CLASS I. *MONANDRIA*. 2. *DIANDRIA*. 3. *TRIANDRIA*. 4. *TETRANDRIA*. 5. *PENTANDRIA*. 6. *HEXANDRIA*. 7. *HEPTANDRIA*. 8. *OCTANDRIA*. 9. *ENNEANDRIA*. 10. *DECANDRIA*.—These ten Classes, which consist of Hermaphrodite

phrodite Flowers, take their Denominations from the Number of Stamina, or male Parts of the Flower. The Word here compounded with the numerical Terms, signifies a *Husband*; so that the Title *Monandria* expresses, that the Flowers of this Class have but *one* Husband, that is, one Stamen; *Diandria*, two Stamina; *Triandria*, three; *Tetrandria*, four; *Pentandria*, five; *Hexandria*, six; *Heptandria*, seven; *Octandria*, eight; *Enneandria*, nine; and *Decandria*, ten. It must be observed however, that the Flowers being Hermaphrodite, as above-mentioned, is in all these Classes a necessary Condition; for should the female Part be wanting, the Plant would belong to some other Class, notwithstanding the Number of Stamina may be such as would otherwise refer it to one of these: And this Caution we give once for all to avoid Repetitions, that when we use the Term *Hermaphrodite*, we mean, that it is a Condition not to be dispensed with.

CLASS XI. *DODECANDRIA*.—This Term in the *Greek* imports that the Flowers have *twelve* Husbands or Stamina. However, the Class is not confined to this Number, but includes all such Hermaphrodite Flowers, as are furnished with any Number of Stamina from *twelve* to *nineteen* inclusive;

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inclusive : No Flowers have been yet found to have eleven Stamina, which is the Reason no Class has been allotted to that Number.

CLASS XII. *ICOSANDRIA*.—This Term imports, that the Flowers have *twenty* Husbands or Stamina : But here again the Title is to be understood with great Latitude ; for though the Plants that belong to this Class are rarely found with less than twenty Stamina, yet they frequently have a greater Number ; and they are therefore not to be known with Certainty from those of the next Class, without having Recourse to their classic Character ; which, not being exprest in the Title, we forbear the Explanation of here, as we shall give it in the Chapter allotted for this Class.

CLASS XIII. *POLYANDRIA*.—This Term imports, that the Flowers have *many* Stamina.

CLASS XIV. *DIDYNAMIA*.—This Term signifies the *Power* or *Superiority* of *two*, and is applied to this Class, because its Flowers have four Stamina, of which there are two longer than the rest : This Circumstance alone is sufficient to distinguish this Class from the fourth, where the four Stamina are equal ; but the Flowers of this Class have also their particular Character,
besides

besides what the Title expresses, their Corollæ being mostly *Ringent*, as will be shewn in its Place*.

CLASS XV. *TETRADYNAMIA*.—This Term expresses the Power or Superiority of *four* ; and accordingly there are in the Flowers of this Class six Stamina, four of which are longer than the rest ; which Circumstance distinguishes them from those of the sixth Class, where the six Stamina are equal : But these Flowers have their particular Character also, their Corollæ being *Cruciform*†.

CLASS XVI. *MONADELPHIA*.—The Word here, compounded with the numerical Term, signifies a *Brother*. This Relation is employed to express the Union of the Filaments of the Stamina, which in this Class do not stand separate, but join at the Base, and form one Substance, out of which they proceed as from a common Mother ; and the Title of the Class expresses a *single* Brotherhood, meaning that there is but *one* Set of Stamina so united, which distin-

* See Chap. 17. See also Part I. Chap. 3. where the Term *Ringent* is explained.

† See Chap. 18. See also Part I. Chap. 3. where the Term *Cruciform* is explained.

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guishes the Class from the two following ones. The Number of Stamina in this Class is not limited: The Flowers have their particular Character*.

CLASS XVII. *DIADELPHIA*.—This Term expresses a *double* Brotherhood, or *two* Sets of Stamina, united in the manner explained in the preceding Class. The Number of the Stamina is not limited: The Flowers of this Class have a very particular Character, their Corolla being *Papilionaceous*, as will be shewn in its Place†.

CLASS XVIII. *POLYADELPHIA*.—This Term expresses *many* Brotherhoods, or Sets of Stamina; the Flowers have no classic Character, farther than is expressed in the Title.

CLASS XIX. *SYNGENESIA*.—This Class contains the compound Flowers described in Part I. Chap. 19. The Title signifies *Congeneration*, alluding to the Circumstance of the Stamina; in which, though the Filaments stand separate, yet the Antheræ, which are the Part more immediately subservient to Generation, are united in a

* See Chap. 19.

† See Chap. 20. See also Part I. Chap. 3. for the Explanation of the Term *Papilionaceous*.

Cylinder

Cylinder, and perform their Office *together*. The classic Character will be explained in its Place*.

CLASS XX. *GYNANDRIA*.—The Term is compounded of two Words, that signify *Wife* and *Husband*; and alludes to the singular Circumstance of this Class, in the Flowers of which the Stamina grow upon the Pistillum; so that the male and female Parts are united, and do not stand separate, as in other Hermaphrodite Flowers.

CLASS XXI. *MONOECIA*.—The Word here, compounded with the numerical Term, signifies a *House* or *Habitation*. To understand the Application of this Title, we must know, that the Plants of this Class are not *Hermaphrodite* but *Androgynous*†, the Flowers that have the Stamina wanting the Pistillum, and those that have the Pistillum wanting the Stamina. Now the Term *Monœcia*, which signifies a *single House*, alludes to this Circumstance; that in this Class the male and female Flowers are both found on the *same* Plant, whereas in the next they have *distinct* Habitations.

CLASS XXII. *DIOECIA*.—This Term, which signifies *two Houses*, is ap-

* See Chap. 22.

† See Part I. Chap. 21.

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plied to this Class (the Plants of which are *Male* and *Female*) to express the Circumstance of the *male* Flowers being on one Plant, and the *female* on another; the contrary of which is the Case of the androgynous Class *Monoecia* last explained.

CLASS XXIII. *POLYGAMIA*.—

The Term signifies *Plurality* of *Marriages*. This Class produces, either upon the same or different Plants, *Hermaphrodite* Flowers, and also Flowers of *one* Sex only, be it male or female; or Flowers of *each* Sex; and the latter receiving Impregnation from, or giving it to the Hermaphrodites, as their Sex happens to be, the Parts essential to Generation in the Hermaphrodite Flowers do not confine themselves to the corresponding Parts within the same Flower, but become of *promiscuous* Use; which is the Reason of giving this Title to the Class.

CLASS XXIV. *CRYPTOGAMIA*.—

The Term signifies *Concealment* of *Marriages*; this Class consisting of such Plants as either bear their Flowers concealed within the Fruit*, or have them so small, as to be imperceptible.

* The *Ficus*, whose Flowers are within the Fruit, used to be put in this Class, but is since removed to the 23d Class *Polygamia*.

CHAP. III.

Explanation of the TITLES of the ORDERS.

THE Titles of the Orders have been given in Chap. 1. It remains to explain them.

CLASS I. to XIII. inclusive.—The Orders of the first thirteen Classes take their Denominations from the Number of the *Pistillum*, or Female Part of the Plant, which is usually reckoned from the *Base* of the *Style*, if there be any ; but if the *Style* be wanting, the Number is fixt from the *Stigmata*. The *Greek* Word, compounded with the numerical Terms in the Titles of these Orders, signifies a *Wife* : *Monogynia* implies *one Wife* or one *Style* ; *Digynia*, *two* *Styles* ; *Trigynia*, *three* ; *Tetragynia*, *four* ; *Pentagynia*, *five* ; *Hexagynia*, *six* ; *Decagynia*, *ten* ; and *Polygynia*, *many*. These are the Titles that occur in the Orders of these thirteen Classes ; and this general Explanation of them will be thought sufficient, as from the Table given in the first Chapter it appears how they are employed in the Classes.

CLASS XIV. *DIDYNAMIA*.—Of the three Orders of this Class the two first

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are founded on a Distinction in the Fruit. The Title of the first Order, *Gymnospermia*, is expressive of such Plants as have *naked* Seeds; and that of the second, *Angiospermia*, of such as have their Seeds in a *Vessel* or *Pericarpium*. The third Order, *Polypetala*, is expressive of such Plants as have *many Petals*: This Order seems to have been established in Favor of one Genus of Plants only, the *Meliantbus*, the Flowers of which are *Polypetalous*, though those of all the rest of this Class are *Mono-petalous**.

CLASS XV. TETRADYNAMIA.

—The two Orders of this Class are founded on a Distinction in the *Pericarpium*. In the first Order, *Siliculosa*, the *Pericarpium* is a *Silicula*, *little Siliqua*; which differs from the *Siliqua* in being round, and having the Apex of the Dissepiment, which had been the Style, prominent beyond the Valves, often so far as to be equal in Length to the Silicula. In the second Order, *Siliquosa*, the *Pericarpium* is a *Siliqua*, which is long and without any remarkable Extension of the Style.

* This Order is omitted in the *Systema Naturæ*, published in 1756. See the Note on this Order in Chapter 17.

CLASS XVI. *MONADELPHIA*. XVII. *DIADELPHIA*. XVIII. *POLYADELPHIA*. The Orders of these three Classes are founded on the Number of the Stamina in each Brotherhood or distinct Set of Stamina. The Titles of the Orders being the same that are used for the Titles of the early Classes of the System, the Explanation need not be repeated here.

CLASS XIX. *SYNGENESIA*.—To understand the orders of this Class, we must explain what is meant by *Polygamy* in Flowers. We have already treated of polygamous *Plants*, and shewn that the Term *Polygamous*, as there applied, alluded to the Intercommunication of the male or female Flowers with the Hermaphrodite ones, either upon the same or a distinct Plant : But in respect to Flowers, the Term is applied to a single Flower only ; for the Flowers of this Class being Compound, a Polygamy arises from the Intercommunication of the several Florets in one and the same Flower. Now the *Polygamy* of *Flowers*, in this Sense of the Word, affords four Cases, which are the Foundations of the four first Orders of this Class. 1st Order, *Polygamia æqualis*, *equal Polygamy*, is when *all* the Florets are *Hermaphrodite*. 2d Order, *Polygamia super-*
G 4
flua

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flua, superfluous Polygamy, when some of the Florets are *Hermaphrodite*, and others *Female* only; for in this Case, as the Fructification is perfected in the Hermaphrodites, the Addition of the Females is a Superfluity. 3d Order, *Polygamia frustranea, frustraneous* or *ineffectual Polygamy*, when some of the Florets are *Hermaphrodite*, and others *Neuter*; for in this Case the Addition of the Neuters is of no Assistance to the Fructification. 4th Order, *Polygamia necessaria, necessary Polygamy*, when some of the Florets are *Male*, and the rest *Female*; for in this Case there being no Hermaphrodites, the Polygamy arising from the Composition of the Florets of different Sexes is *necessary* to perfect the Fructification. 5th Order, *Polygamia segregata*. The Title signifies to be separated; the Plants of this Order having partial Cups growing out of the common Calyx which surround and divide the Flosculi or Florets. 6th Order, *Monogamia*: The Title signifies a *single Marriage*, and is opposed to the *Polygamia* of the four other Orders; for in this, though the Antheræ are united, which is the essential Character of the Flowers of this Class, the Flower is *simple*, and not compounded of *many* Florets, as in the other Orders.

CLASS

CLASS XX. *GYNANDRIA*. The Orders of this Class are founded on the Number of Stamina. The Titles have been already explained.

CLASS XXI. *MONOECIA*. XXII. *DIOECIA*. These two Classes, whose Flowers have no fixt Character but that of not being Hermaphrodite, take in the Characters of almost every other Class; and the Orders have accordingly been disposed under the Titles of those Classes, to which their respective Flowers would have belonged, if the Stamina and Pistillum had been under the same Covers: As the Explanation of all these Titles has been given in the last Chapter in the Explanation of the Classes, it need not be repeated here.

CLASS XXIII. *POLYGAMIA*. In this Class the Titles of the two first Orders are the same with the Titles of the twenty-first and twenty-second Classes, and are to be understood in the same Manner; that is, 1. *Monoecia*, when the Polygamy is on the *same* Plant; and, 2. *Dioecia*, when it is on *distinct* Plants. The Order *Trioecia* has been established in Favour of a single Genus, the *Ficus*; in which the Polygamy is on *three* distinct Plants, one producing *Male* Flowers,
another

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another *Female*, and a third *Hermaphrodite*, or *Androgynous*.

CLASS XXIV. *CRYPTOGAMIA*. The Orders of this Class are, 1. *Filices*, *Ferns*. 2. *Musci*, *Mosses*. 3. *Algæ*, *Flags*; and, 4. *Fungi*, *Mushrooms*. As the Explanation of the Character of these Orders will come more properly into the Chapter that treats particularly of this Class, we shall content ourselves here with having interpreted the Titles as above.

C H A P. IV.

Of the first Class, MONANDRIA.

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnished with but *one* Stamen. The Orders are *two*, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have but *one* Style. This Order contains eleven Genera, Distinguished into, 1. *Trilocular*, such as have the *Pericarpium* divided into three *Loculaments*: of which there are eight, viz. *Canna*, *Amomum*, *Costus*, *Alpinia*, *Maranta*, *Curcuma*, *Kæmpferia*, and *Thalia*. 2. *Monospermous*, such as have a single Seed, of which there
are

are three, viz. *Boerhavia*, *Salicornia*, and *Hippuris**.

Order II. *DIGYNIA*, comprehending such Plants as have *two* Styles. This Order contains four Genera, viz. *Corispermum*, *Callitriche*, *Blitum*†, and *Cinna*‡.

C H A P. V.

Of the second Class, DIANDRIA.

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnished with *two* Stamina. The Orders are three, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have but *one* Style. This Order contains thirty Genera, distinguished into, 1. Such as have *regular* Corollæ, of which there are ten, viz. *Nyctanthes*, *Jasminum*, *Ligustrum*, *Phillyrea*, *Olea*, *Chionanthus*, *Syringa*, *Dialium*, *Eranthemum*, and *Circæa*. 2. Such as have *irregular* Corollæ, and the Fruit *Angiospermous* ||; of which there are

* *Scitamineæ*, fair, beautiful, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

† *Plantæ*, one of the seven Orders of Vegetables.

‡ *Gramminæ*, Grass, one of the seven Orders of Vegetables.

|| The Seeds in a Vessel.

ten,

ten, viz. *Veronica*, *Pæderota*, *Justicia*, *Dianthera*, *Gratiola*, *Schwenkia*, *Pinguicula*, *Utricularia*, *Calceolaria*, and *Globba*. 3. Such as have irregular Corollæ, and the Fruit *Gymnospermous**; of which there are ten, viz. *Verbena*, *Lycopus*, *Ametbystea*, *Cunila*, *Ziziphora*, *Monarda*, *Rosmarinus*, *Salvia*, *Collinsonia*, and *Morina*.

ORDER II. *DIGYNIA*, comprehending such Plants that have *two* Styles. This Order contains but one Genus, viz. *Anthoxanthum*.

ORDER III. *TRIGYNIA*, comprehending such Plants that have *three* Styles. There is but one Genus of this Order, viz. *Piper*.

C H A P. VI.

Of the third Class TRIANDRIA.

THIS Class consists of such Plants as bear Hermaphrodite Flowers, furnished with three Stamina. The Orders are three, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have but *one* Style. This Order contains twenty-nine Genera, distinguished into, 1. Those whose Flowers have

* The Seeds naked.

no Spatha or Amentum; of which there are thirteen, viz. *Valeriana*, *Olax*, *Willichia*, *Tamarindus*, *Rumphia*, *Cneorum*, *Camocladia*, *Melothria*, *Ortega*, *Loeflingia*, *Polycnemon*, *Hippocratea*, and *Rotala*. 2. Such as have spathaceous Flowers, and a trilocular Capsule; of which there are ten, viz. *Crocus*, *Ixia*, *Gladiolus*, *Antholyza*, *Iris*, *Moræa*, *Wachendorfia*, *Commelina*, *Callisia*, and *Xyris*. 3. Such as have an imbricated Amentum, and are Gymnomonospermous*; of which there are six, viz. *Schoenus*, *Cyperus*, *Scirpus*, *Eriophorum*, *Lygeum*, and *Nardus*.

ORDER II. *DIGYNIA*, comprehending such Plants as have *two* Styles. This Order contains twenty-nine Genera†, viz. *Bobartia*, *Cornucopiæ*, *Saccharum*, *Phalaris*, *Paspalum*, *Panicum*, *Phleum*, *Alopecurus*, *Milium*, *Agrostis*, *Aira*, *Melica*, *Poa*, *Briza*, *Uniola*, *Dactylis*, *Cynosurus*, *Festuca*, *Bromus*, *Stipa*, *Avena*, *Lagurus*, *Arundo*, *Aristida*, *Lolium*, *Elymus*, *Secale*, *Hordeum*, and *Triticum*.

ORDER III. *TRIGYNIA*, comprehending such Plants as have *three* Styles. This Order contains eleven Genera, viz. *Eriocaulon*,

* The Seeds single and naked.

† All the Plants of this Order are Grasses, the Leaves of which are Food for Cattle, the small Seeds for Birds, and the larger Grain for Man.

Montia, Proserpinaca, Triplaris, Holosteum, Polycarpon, Mollugo, Minuartia, Queria, Lechea, and Koenigia.

C H A P. VII.

Of the fourth Class, TETRANDRIA.

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnished with *four* Stamina. The Flowers of this Class may be known from those of the fourteenth by this Distinction, that the Stamina are of an equal Length; whereas those of fourteenth, which have four Stamina likewise, there are two long and two short. The Orders of this Class are *three*, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have but *one* Style. This Order contains sixty-two Genera, distinguished into, 1. Such as have *aggregate* Flowers, properly so called*, with the Seeds single and naked; of which there are seven, viz. *Protea, Cephelanthus, Globularia, Dipsacus, Knautia, Scabiosa, and Allionia.* 2. Such as have their Flowers *monopetalous* on a double Fruit, and the *Style* bifid, of which there are

* See Part I. Chap. 19.

twelve,

twelve*, viz. *Hedyotis*, *Spermacoce*, *Sherardia*, *Asperula*, *Diodia*, *Knoxia*, *Manettia*, *Houstonia*, *Galium*, *Crucianella*, *Rubia*, and *Scabrita*. 3. Such as have *monopetalous* Flowers otherwise circumstanced; of which there are twenty, viz. *Sipbonanthus*, *Catesbæa*, *Ixora*, *Pavetta*, *Petesia*, *Mitchella*, *Callicarpa*, *Aquartia*, *Polypremum*, *Penæa*, *Blaeria*, *Buddleja*, *Exacum*, *Plantago*, *Scoparia*, *Rhacoma*, *Centunculus*, *Sanguisorba*, *Cissus*, and *Ægiphila*. 4. Such as are *tetrapetalous* and *complete*†; of which there are twelve, viz. *Epimedium*, *Cornus*, *Fagara*, *Tomex*, *Ptelea*, *Ludwigia*, *Oldenlandia*, *Ammannia*, *Isnardia*, *Santalum*, *Trapa*, and *Samarra*. 5. Such as are *incomplete*‡; of which there are eleven, viz. *Dorstenia*, *Elaeagnus*, *Crameria*, *Rivina*, *Salvadora*, *Campbora*, *Alchemilla*, *Stenotheca*, *Cometes*, *Sirium*, and *Acaena*.

ORDER II. *DIGYNIA*, comprehending such Plants as have *two* Styles. This Order contains six Genera, viz. *Aphanes*, *Cruzita*, *Bufonia*, *Hamamelis*, *Cuscuta*, and *Hypecoum*

* These are the *Stellatæ*, Starry Plants, of *Ray*. See his *Hist. of Plants*, page 447. They are held to be astringent and diuretic.

† Not wanting either Calyx or Corolla.

‡ Calyx or Corolla wanting.

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ORDER III. *TETRAGYNIA*, comprehending such Plants as have *four* Styles. This Order contains seven Genera, viz. *Ilex*, *Col-denia*, *Potamogeton*, *Ruppia*, *Sagina*, *Myginda*, and *Tillæa*.

C H A P. VIII.

Of the fifth Class, PENTANDRIA.

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnished with *five* Stamina. The Orders are six, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have but *one* Style*. This Order contains one Hundred and Thirty-nine Genera, distinguished into 1. *Monopetalous Tetraspermous*†, of which there are sixteen‡, viz. *Heliotropium*, *Myosotis*, *Lithospermum*, *Anchusa*, *Cynoglossum*, *Pulmonaria*, *Symphytum*, *Onosma*, *Cerinthe*, *Borago*, *Asperugo*, *Lycopsis*, *Echium*, *Nolana*, *Tournefortia*, and

* The Berries of the monopetalous Plants of this Order are for the most Part poisonous.

† With four Seeds.

‡ These are the *Asperifolia*, rough leaved Plants of Ray's Hist. page 487. They are accounted glutinous and vulnerary.

Messer-

Messerschmidia. 2. *Monopetalous* with the Capsule within the Flower; of which there are twenty-nine, viz. *Diapensia*, *Aretia*, *Androsace*, *Primula*, *Cortusa*, *Porana*, *Soldanella*, *Dodecatheon*, *Cyclamen*, *Menyanthes*, *Hottonia*, *Hydrophyllum*, *Lyfimachia*, *Anagallis*, *Theophrasta*, *Patagonula*, *Spigelia*, *Ophiorrhiza*, *Randia*, *Azalea*, *Plumbago*, *Phlox*, *Convolvulus*, *Ipomoea*, *Lisiantbus*, *Brossaea*, *Allamanda*, *Polemonium*, and *Nigri-na*. 3. *Monopetalous* with the Germen below the Flower; of which there are twenty-six, viz. *Campanula*, *Roëlla*, *Phyteuma*, *Trachelium*, *Samolus*, *Nauclea*, *Rondeletia*, *Macrocnemum*, *Bellonia*, *Portlandia*, *Cinchona*, *Psychotria*, *Coffea*, *Chiococca*, *Ceropegia*, *Lonicera*, *Triosteum*, *Morinda*, *Conocarpus*, *Hamelia*, *Eritalis*, *Menais*, *Genipa*, *Matthiola*, *Scævola*, and *Mussaenda*. 4. Such as have declining Stamina; of which there are seven, viz. *Mirabilis*, *Coris*, *Verbascum*, *Datura*, *Hyoscyamus*, *Nicotiana*, and *Atropa*. 5. *Monopetalous* with a Berry above the Receptacle; of which there are twenty, viz. *Physalis*, *Solanum*, *Capsicum*, *Strychnos*, *Jacquinia*, *Chironia*, *Brunsfelsia*, *Cordia*, *Pergularia*, *Cestrum*, *Ebretia*, *Varronia*, *Laugieria*, *Lycium*, *Chrysophyllum*, *Sideroxylum*, *Rhamnus*,
H *Arduina*,

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Arduina, *Ellisia*, and *Phyllica*. 6. Polypetalous, of which there are twenty-eight, viz. *Ceanothus*, *Byttneria*, *Myrsine*, *Celastrus*, *Euonymus*, *Diosma*, *Brunia*, *Itea*, *Galax*, *Cedrela*, *Mangifera*, *Hirtella*, *Ribes*, *Gronovia*, *Hedera*, *Vitis*, *Lagoecia*, *Sauvagesia*, *Claytonia*, *Achyranthes*, *Roridula*, *Kubnia*, *Plectronia*, *Cyrilla*, *Aquilicia*, *Heliconia*, *Carissa*, and *Celosia*. 7. Incomplete Flowers; of which there are three, viz. *Illecebrum*, *Glaux*, and *Thesium*. 8. Such as have the lobes of the *Corollæ* bent obliquely to the Right; of which there are nine, viz. *Rauvolfia*, *Cerbera*, *Vinca*, *Gardenia*, *Nerium*, *Plumeria*, *Echites*, *Cameraria*, and *Tabernæmontana*.

ORDER II. *DIGYNIA*, comprehending such Plants that have two Styles. This Order contains sixty-nine Genera, distinguished into 1. Such as have the Lobes of the *Corollæ* bent obliquely to the right; of which there are six, viz. *Periploca*, *Cynanchum*, *Apocynum*, *Asclepias*, *Linconia*, and *Stapelia*. 2. Monospermous*; of which there are ten, viz. *Herniaria*, *Chenopodium*, *Beta*, *Salsola*, *Anabasis*, *Cressa*, *Gomphrena*, *Steris*, *Bossea*, and *Ulmus*. 3. Polyspermous†; of which there are seven, viz. *Nama*, *Hydrolea*, *Heuchera*, *Swertia*, *Schrebera*, *Velezia*, and *Gentiana*.

* Single seeded.

† Many seeded.

4. Gymnodispermous†, with a simple Umbel; of which there are three§, viz. *Pbyllis*, *Eryngium*, and *Hydrocotyle*. 5. Gymnodispermous with an *universal* and partial *Involucrum*; of which there are twenty-seven, viz. *Sanicula*, *Astrantia*, *Bupleurum*, *Echinophora*, *Tordylium*, *Caucalis*, *Artemisia*, *Daucus*, *Ammi*, *Bunium*, *Conium*, *Selinum*, *Athamanta*, *Peucedanum*, *Critbnum*, *Hasselquistia*, *Cachrys*, *Ferula*, *Laserpitium*, *Heracleum*, *Ligusticum*, *Angelica*, *Sium*, *Sison*, *Bubon*, *Cuminum*, and *Oenanthe*. 6. Gymnodispermous, with only a *partial* Umbel; of which there are eight, viz. *Phellandrium*, *Cicuta*, *Æthusa*, *Coriandrum*, *Scandix*, *Chærophyllyum*, *Imperatoria*, and *Seseli*. 7. Gymnodispermous without any *Involucrum*, of which there are eight, viz. *Thapsia*, *Pastinaca*, *Smyrnum*, *Anethum*, *Carum*, *Pimpinella*, *Apium*, and *Ægopodium*.

ORDER III. TRIGYNIA, comprehending such Plants as have *three* Styles. This Order contains sixteen Genera, viz. *Rhus*, *Vi-*

† Having two naked Seeds.

§ These Plants, and those of the two Distinctions next following, which are *Gymnodispermous* also, are the *umbellate* Plants of *Tournefort's* Seventh Class. See his Institution, R. H. In dry Soils they are aromatic, warm, resolvent, and carminative, but in moist Places poisonous. The Virtue is in the Roots and Seeds.

H 2

burnum,

burnum, Cassine, Sambucus, Spatelia, Staphylea, Tamarix, Turnera, Telephium, Corrigiola, Pharnaceum, Alsine, Drypis, Basella, Sarothra, and Xylophylla.

ORDER IV. *TETRAGYNIA*, comprehending such Plants as have *four* Styles. This Order contains *two* Genera, viz. *Parnassia*, and *Evolvulus*.

ORDER V. *PENTAGYNIA*, comprehending such Plants as have *five* Styles. This Order contains nine Genera, viz. *Aralia, Mahernia, Statice, Linum, Aldrovanda, Drosera, Crassula, Sibbaldia, and Gisekia.*

ORDER VI. *POLYGYNIA*, comprehending such Plants as have many Styles. This Order contains but one Genus, viz. *Myosurus*.

CH A P. IX.

Of the sixth Class, HEXANDRIA.

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnish with *six* Stamina. The Flowers of this Class may be known from those of the *fifteenth*, by this Distinction, that the Stamina are of *equal* Length; whereas in those of the *fifteenth* which have *six* Stamina likewise, there are *four long* and *two short*. The Orders of this Class are five, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have but *one* Style. This Order contains fifty-six Genera, distinguished into 1. Such as have *trifid* Corollæ, and a *Calyx*, of which there are five, viz. *Bromelia*, *Tillandsia*, *Burmannia*, *Tradescantia*, and *Bursera*. 2. Such as have a *monophyllous* Spatha, of which there are seven, viz. *Pontederia*, *Hæmanthus*, *Galanthus*, *Leucojum*, *Tulbagia*, *Narcissus*, and *Pancratium*. 3. Such as are *hexapetalous* and *naked**; of which there are twenty-one, viz. *Crinum*, *Amaryllis*, *Bulbocodium*, *Aphyllanthes*, *Allium*, *Lilium*, *Fritillaria*, *Uvularia*, *Gloriosa*, *Tulipa*, *Erythronium*, *Albuca*, *Ornithogalum*, *Scilla*, *Hypoxis*, *Cyanella*, *Asphodelus*, *Anthericum*, *Leontice*, *Dracæna*, and *Asparagus*. 4. *Monopetalous* and *naked*, of which there are ten, viz. *Convallaria*, *Polyanthes*, *Hyacinthus*, *Alettris*, *Yucca*, *Aloe*, *Agave*, *Alstroemeria*, *Capura*, and *Hemerocallis*. 5. Such as have a *Calyx*, but the Corolla not *trifid*; of which there are thirteen, viz. *Acorus*, *Orontium*, *Calamus*, *Juncus*, *Achras*, *Richardia*, *Prinos*, *Berberis*, *Loranthus*, *Frankenia*, *Hillia*, *Peplis*, and *Canaria*.

ORDER II. *DIGYNIA*, comprehending such Plants as have *two* Styles. This Or-

* Without a *Calyx*.

der contains two Genera, viz. *Atraphaxis*, and *Oryza*.

ORDER III. *TRIGYNIA*, comprehending such Plants as have *three* Styles. This Order contains nine Genera, viz. *Flagellaria*, *Rumex*, *Scheuchzeria*, *Triglochin*, *Melanthium*, *Medeola*, *Trillium*, *Colchicum*, and *Helonias*.

ORDER IV. *TETRAGYNIA*, comprehending such Plants as have *four* Styles. Of this Order there is but one Genus, viz. *Petiveria*.

ORDER V. *POLYGYNIA*, comprehending such Plants as have *many* Styles. Of this Order there is but one Genus, viz. *Alisma*.

C H A P. X.

Of the seventh Class, HEPTANDRIA.

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnished with *seven* Stamina. The Orders of this Class are four, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have but *one* Style. This Order contains three Genera, viz. *Trientalis*, *Disandra*, and *Æsculus*.

ORDER II. *DIGYNIA*, comprehending such Plants as have *two* Styles. This Order contains but one Genus, viz. *Limeum*.

ORDER

ORDER III. *TETRAGYNIA*, comprehending such Plants as have *four* Styles. Of this Order there is but one Genus, viz. *Saururus*.

ORDER IV. *Heptagynia*, containing such Plants as have *seven* Styles. Of this Order there is but one Genus, viz. *Septas*.

C H A P. XI.

Of the eighth Class, OCTANDRIA.

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnished with *eight* Stamina. The Orders are four, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have but *one* Style. Of this Order there are thirty-one Genera, viz. *Tropæolum*, *Osbeckia*, *Rhexia*, *Oenothera*, *Gaura*, *Epilobium*, *Melicocca*, *Grissea*, *Amyris*, *Allophylus*, *Combretum*, *Fuchsia*, *Ximenia*, *Mimusops*, *Jambolifera*, *Memecylon*, *Lawsonia*, *Vaccinium*, *Erica*, *Daphne*, *Dirca*, *Gnidia*, *Stellera*, *Passerina*, *Lachnæa*, *Antichorus*, *Cblora*, *Dodonæa*, *Ophira*, *Guarea*, *Bæckea*.

ORDER II. *DIGYNIA*, comprehending such Plants as have *two* Styles. This Order contains four Genera, viz. *Galenia*, *Weinmannia*, *Moebringia*, and *Schmidelia*.

ORDER III. *TRIGYNIA*, comprehending such Plants as have *three* Styles. This Order contains five Genera, viz. *Polygonum*, *Coccoloba*, *Paullinia*, *Cardiospermum*, and *Sapindus*.

ORDER IV. *TETRAGYNIA*, comprehending such Plants as have *four* Styles. This Order contains three Genera, viz. *Paris*, *Adoxa*, and *Elatine*.

C H A P. XII.

Of the ninth Class, ENNEANDRIA.

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnished with *nine* Stamina. The Orders are three, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have but *one* Style. This Order contains four Genera, viz. *Laurus*, *Tinus*, *Anacardium*, and *Cassya*.

ORDER II. *TETRAGYNIA*, comprehending such Plants as have *three* Styles. This Order contains but one Genus, viz. *Rheum*.

ORDER III. *HEXAGYNIA*, comprehending such Plants as have *six* Styles. Of this Order there is but one Genus, viz. *Butomus*.

C H A P.

C H A P. XIII.

Of the tenth Class, DECANDRIA.

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnished with *ten* Stamina. The Orders are five, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have *one* Style. This Order contains fifty-three Genera, distinguished into 1. Such as have *declined* Stamina, of which there are fifteen, viz. *Sophora*, *Anagyris*, *Cercis*, *Bauhinia*, *Parkinsonia*, *Hymenæa*, *Cassia*, *Poinciana*, *Cæsalpinia*, *Guilandina*, *Guaiacum*, *Cynometra*, *Anacardium*, *Swietenia*, and *Dictamnus*. 2. Such as have *erect* Stamina, of which there are thirty-eight, viz. *Ruta*, *Toluifera*, *Hæmatoxylum*, *Adenanthera*, *Melia*, *Trichilia*, *Zygophyllum*, *Quassia*, *Fagonia*, *Tribulus*, *Thryallis*, *Murraya*, *Monotropa*, *Jussieua*, *Limonia*, *Melastoma*, *Kalmia*, *Ledum*, *Quisqualis*, *Dais*, *Bergera*, *Bucida*, *Copaifera*, *Samyda*, *Rhododendron*, *Andromeda*, *Epigæa*, *Gualtheria*, *Arbutus*, *Clethra*, *Pyrola*, *Proso-pis*, *Heisteria*, *Chalcas*, *Codon*, *Styrax*, *Turraea*, and *Dionæa*.

ORDER II. *DIGYNIA*, comprehending
such

such Plants as have *two* Styles. Of this Order there are twelve Genera, viz. *Royena*, *Hydrangea*, *Cunonia*, *Chrysofplenium*, *Saxifraga*, *Tiarella*, *Metella*, *Scleranthus*, *Trianthema*, *Gypsophila*, *Saponaria*, and *Dianthus*.

ORDER III. *TRIGYNIA*, comprehending such Plants as have *three* Styles. Of this Order there are eleven Genera, viz. *Cucubalus*, *Silene*, *Stellaria*, *Arenaria*, *Cherleria*, *Garidella*, *Malpighia*, *Banisteria*, *Triopteris*, *Erythroxyton*, and *Hiræa*.

ORDER IV. *PENTAGYNIA*, comprehending such Plants as have *five* Styles. Of this Order there are fourteen Genera, viz. *Averrhoa*, *Spondias*, *Cotyledon*, *Sedum*, *Penthorum*, *Oxalis*, *Suriana*, *Lychnis*, *Agrostema*, *Cerastium*, *Spergula*, *Grielum*, *Forskoblea*, and *Bergia*.

ORDER V. *DECAGYNIA*, comprehending such Plants as have *ten* Styles. This Order contains *two* Genera, viz. *Neurada*, and *Phytolacca*.

C H A P. XIV.

Of the eleventh Class, DODECANDRIA.

THIS Class, notwithstanding its Title which is expressive of *twelve* Stamina, consists of such Plants as bear *Hermaprodite* Flowers, furnished with any Number of Stamina from *twelve*, to nineteen inclusive*. The Orders are five, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have but *one* Style. This Order contains twenty Genera, viz. *Asarum*, *Getbyllis*, *Bocconia*, *Rhizophora*, *Blakea*, *Garcinia*, *Winterana*, *Cratæva*, *Triumfetta*, *Bassia*, *Peganum*, *Halefia*, *Nitraria*, *Portulaca*, *Hudsonia*, *Lytbrum*, *Ginora*, *Decumaria*, *Befaria*, and *Vatica*.

ORDER II. *DIGYNIA*, comprehending such Plants as have *two* Styles. Of this Order there are *two* Genera, viz. *Heliocarpus*, and *Agrimonia*.

ORDER III. *TRIGYNIA*, comprehending such Plants as have *three* Styles. This

* *Tormentilla* is an Exception, belonging to the next Class, though it has but sixteen Stamina. The Characters of the Fructification in the next Class over-rule the Number of the Male Part express'd in its Title.

Order

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Order contains two Genera, viz. *Refeda* and *Euphorbia*.

ORDER IV. *PENTAGYNIA*, comprehending such Plants as have *five* Styles. This Order contains but one Genus, viz. *Glinus*.

ORDER V. *DODECAGYNIA*, comprehending such Plants as have *twelve* Styles. This Order contains but one Genus, viz. *Sempervivum*.

C H A P. XV.

Of the twelfth Class, ICOSANDRIA.*

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, of the following Characters, viz. 1. A Calyx monophyllous, and concave. 2. The Corolla fastened by its Claws to the inner Side of the Calyx. 3. The Stamina twenty or more. As the Number of Stamina in this Class, notwithstanding its Title, is not limited, an Attention must be had to the two first Characters, to distinguish the Flowers from those of the next Class, with which

* This Class furnishes the Fruits most in Esteem.

they

they might otherwise be confounded. The Orders are five, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have but *one* Style. This Order contains *ten* Genera, viz. *Cactus*, *Eugenia*, *Philadelphus*, *Psidium*, *Myrtus*, *Punica*, *Amygdalus*, *Prunus*, *Plinia*, and *Chrysoalanus*.

ORDER II. *DIGYNIA*, comprehending such Plants as have *two* Styles. Of this Order there is but one Genus, viz. *Cratægus*.

ORDER III. *TRIGYNIA*, comprehending such Plants as have *three* Styles. This Order contains two Genera, viz. *Sorbus*, and *Sesuvium*.

ORDER IV. *PENTAGYNIA*, comprehending such Plants as have *five* Styles. This Order contains six Genera, viz. *Mespilus*, *Pyrus*, *Tetragonia*, *Mesembryanthemum*, *Aizoon*, and *Spiræa*.

ORDER V. *POLYGYNIA*, comprehending such Plants as have *many* Styles. This Order contains nine Genera, viz. *Rosa*, *Rubus*, *Fragaria*, *Potentilla*, *Tormentilla*, *Geum*, *Dryas*, *Comarum*, and *Calycanthus*.

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CHAP. XVI.

Of the thirteenth Class, POLYANDRIA.*

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnished with *many* Stamina. The Distinction between this Class and the twelfth may be known by having Recourse to the Characters of the twelfth Class in the preceding Chapter. The Orders are seven, viz.

ORDER I. *MONOGYNIA*, comprehending such Plants as have but *one* Style. This Order contains thirty-six Genera, distinguished into, 1. Such as have scarce *any* Style, of which there are thirteen, viz. *Marcgravia*, *Rheedia*, *Capparis* †, *Aetæa*, *Sanguinaria*, *Podophyllum*, *Chelidonium*, *Papaver*, *Argemone*, *Muntingia*, *Cambogia*, *Sarracena*, and *Nymphæa*. 2. Such as have a Style of some Length, of which there are twenty-three, viz. *Bixa*, *Sloanea*, *Mammea*, *Ochna*, *Calophyllum*, *Grias*, *Tilia*, *Laetia*,

* The Fruits of this Class are often poisonous; which makes it necessary to distinguish them from those of the last, which abounds with eatable Fruits.

† *Capparis* has some Length of Style.

Elao-

Elæocarpus, *Lecythis*, *Vateria*, *Lagerstroemia*, *Thea*, *Caryophyllus*, *Mentzelia*, *Delima*, *Cistus*, *Prockia*, *Corchorus*, *Seguiera*, *Loofa*, *Trewia*, and *Trilix*.

ORDER II. *DIGYNIA*, comprehending such Plants as have *two* Styles. This Order contains *four* Genera, viz. *Pæonia*, *Calligonum*, *Curatella*, and *Fothergilla*.

ORDER III. *TRIGYNIA*, comprehending such Plants as have *three* Styles. This Order contains *two* Genera, viz. *Delphinium*, and *Aconitum*.

Order IV. *TETRAGYNIA*, comprehending such Plants as have *four* Styles. This Order contains *three* Genera, viz. *Tetracera*, *Caryocar*, and *Cimicifuga*.

ORDER V. *PENTAGYNIA*, comprehending such Plants as have *five* Styles. This Order contains *three* Genera, viz. *Aquilegia*, *Nigella*, and *Reaumuria*.

ORDER VI. *HEXAGYNIA*, comprehending such Plants as have *six* Styles. This Order contains but one Genus, viz. *Stratiotes*.

ORDER VII. *POLYGYNIA*, comprehending such Plants as have *many* Styles. This Order contains *eighteen* Genera, viz. *Dillenia*, *Liriodendron*, *Magnolia*, *Michelia*, *Uvaria*, *Annona*, *Anemone*, *Atragene*, *Clematis*,

tis, Thalictrum, Adonis, Illicium, Ranunculus, Trollius, Isopyrum, Helleborus, Caltha, and Hydrastis.

C H A P. XVII.

Of the fourteenth Class, DIDYNAMIA.

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnished with *four* Stamina; *two* of which are longer than the rest. This Circumstance would suffice to distinguish it from the fourth Class, in which the four Stamina are *equal*; however, as the Flowers of this Class have a particular Structure, there are general Characters which will nearly serve for the whole Class; and these we shall give at Length.

Characters of the Class DIDYNAMIA.

CALYX—A Perianthium, monophyllous, erect, tubulate, quinquefid, with Segments for the most Part unequal, and persisting.

COROLLA—Monopetalous and erect, the Base of which contains the Honey, and does the Office of a Nectarium. The upper Lip strait: the lower spreading and trifid. The middle Lacinia the broadest.

STA-

STAMINA—Four Filaments, subulate, inserted in the tube of the Corolla, and inclined towards the back thereof. The two inner and nearest the shortest. All of them parallel, and rarely exceeding the length of the Corolla. The Antheræ lodged under the upper Lip of the Corolla in pairs; in each of which respectively the two Antheræ approach each other.

PISTILLUM—The Germen commonly above the Receptacle. The Style single, filiform, bent in the same form as the Filaments, usually placed within them, a little exceeding them in length, and slightly curved towards the summit. The Stigma for the most Part emarginate.

PERICARPIUM—Either wanting (see the First Order) or, if present, usually Bilocular (see the Second Order.)

SEEDS—If no Pericarpium, four, lodged within the hollow of the Calyx, as in a Capsule; but if there be a Pericarpium, more numerous, and fastened to a Receptacle placed in the Middle of the Pericarpium.

The Flowers of this Class are for the most Part almost upright, but inclining a little at an acute Angle from the Stem, that the Corolla may more easily cover the An-

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theræ

theræ, and that the Pollen may fall on the Stigma, and not be soaked with the rain. The essential Character is in the four Stamina; of which the two nearest are shorter and all four close to each other, and transmitted with the single Style of the Pistillum through a Corolla that is unequal.

The Orders of this Class are two, viz.

ORDER I. *GYMNOSPERMIA**, comprehending such Plants as have *naked* Seeds. This Order has these farther Characters, viz. the Seeds *four* (excepting *Phryma*, which is *monospermous*;) and the Stigma *bipartite*, and *acute*, with the lower Lacinia *reflexed*. It contains thirty-four Genera, distinguished into 1. Such as have the Calyx quinquedid, and nearly equal, of which there are twenty, viz. *Ajuga*, *Teucrium*, *Satureja*, *Thymbra*, *Hyssopus*, *Nepeta*, *Lavandula*, *Betonica*, *Sideritis*, *Mentha*, *Glechoma*, *Perilla*, *Lamium*, *Galeopsis*, *Stachys*, *Ballota*, *Marrubium*, *Leonurus*, *Phlomis*, and *Moluccella*. 2. Such as

* The Plants of this Order are scented, and are accounted cephalic and resolvent. The Virtue is in the Leaves. They are the Labiati (lipped Plants) of *Tournefort*, and Verticillati (Plants that flower at the Joints) of *Ray's Hist. Plant.* 508.

have

have the Calyx *bilabiate*, divided into two Lips; of which there are fourteen, viz. *Clinopodium*, *Origanum*, *Thymus*, *Melissa*, *Dracocephalon*, *Horminum*, *Melittis*, *Ocimum*, *Trichostema*, *Scutellaria*, *Prunella*, *Cleonia*, *Praefum*, and *Phryma*.

ORDER II. *ANGIOSPERMIA*†, comprehending such Plants as have the Seeds in a *Pericarpium*, which Circumstance is constant, and distinguishes this Order from the last under every Form. To this Character may be added that of a Stigma, commonly *obtuse*. This Order contains sixty-three Genera, distinguished into 1. Such as have a *simple* Stigma, and *personate* Corollæ; of which there are thirteen, viz. *Bartisia*, *Rhinanthus*, *Euphrasia*, *Melampyrum*, *Lathræa*, *Schwalbea*, *Tozzia*, *Pedicularis*, *Gerardia*, *Chelone*, *Gesneria*, *Antirrhinum*, and *Cymbaria*. 2. A *simple* Stigma, and *spreading* Corollæ, of which there are twenty-four, viz. *Craniolaria*, *Martynia*, *Torenia*, *Scrophularia*, *Celsia*, *Digitalis*, *Bignonia*, *Citharexylum*, *Halleria*, *Crescentia*, *Gmelina*, *Petræa*, *Lantana*, *Cornutia*, *Loeselia*, *Capraria*,

† These are the *Personati*, *Personate* Flowers of Tournefort.

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Selago, *Hebenstretia*, *Erinus*, *Buchnera*, *Browallia*, *Linnaea*, *Sibthorpia*, and *Limosella*.

3. With a double Stigma ; of which there are twenty-five, viz. *Stemodia*, *Obolaria*, *Orobanche*, *Dodartia*, *Lippia*, *Sesamum*, *Mimulus*, *Ruellia*, *Barleria*, *Duranta*, *Ovieda*, *Volkameria*, *Clerodendron*, *Vitex*, *Bontia*, *Columnnea*, *Acanthus*, *Pedaliium*, *Avicennia*, *Vandellia*, *Manulea*, *Besleria*, *Lindernia*, *Premna*, and *Hyobanche*. 4. Such as have many Petals, of which there is but one Genus, viz. *Meliantbus*.

CHAP.

CHAP. XVIII.

Of the fifteenth Class, TETRADYNAMIA.*

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnished with *six* Stamina, *two* of which are shorter than the rest, by which last Circumstance it may be distinguished from the sixth Class, whose Flowers have *six equal* Stamina. The Flowers of this Class are of a particular Structure, answering to the Characters following.

Characters of the Class TETRADYNAMIA.

CALYX—A Perianthium tetraphyllous, and oblong; the Leaves of which are ovato-

* These are the *Cruciformes* (*cross-shaped* Flowers) of *Tournefort*, and the *Siliculosæ*, and the *Siliquosæ* (Plants that have a *Silicula* and *Siliqua*) of *Ray's Hist. Plant.* 777. This Class is truly natural, and has been assumed as such by all Systematists, though Individuals have often added one or more Genera to it, contrary to Nature. *Linnaeus* thinks he has given no wrong one, unless it be *Cleome*. The Distinction into *Siliculose*, and *Siliquose*, is admitted by all. The Plants are held to be Antiscorbutic and Diuretic. The Taste in most is watery, mixt with a Sharpness. They commonly lose their Quality when dried. The essential Character of the several Genera in this Class depends commonly on the Situation of the nectariferous Glandule.

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oblong, concave, obtuse, conniving, gibbous downwards at the Base, the opposite ones equal and deciduous. The Calyx in these Flowers is a Nectarium ; which is the Reason of the Base being gibbous.

COROLLA—called Cruciform. Four equal Petals. The Claws plano-subulate, erect, and somewhat longer than the Calyx. The Limb plane. The Laminæ widening outwards, obtuse, the Sides hardly touching one another. The Insertion of the Petals is in the same Circle with the Stamina.

STAMINA—The Filaments six, and subulate ; of which two that are opposite are of the Length of the Calyx ; the other four somewhat longer, but not so long as the Corolla. The Antheræ oblong, acuminate, thicker at the Base, erect, and with their Tops leaning outwards. There is a nectariferous Glandule, which in the different Genera has various Appearances ; it is seated close to the Stamina, and particularly to the two shorter ones, to whose Base it is fastened ; and these have a light Curvature to prevent their pressing upon it, whereby those Filaments become shorter than the rest.

PISTILLUM—The Germen above the Receptacle increasing daily in Height. The
Style

Style either of the Length of the longer Stamina, or wanting. The Stigma obtuse.

PERICARPIUM—A Siliqua of two Valves, often Bilocular, opening from the Base to the Top. The Dissepiment projecting at the Top beyond the Valves, the prominent Part thereof having before served as a Style.

SEEDS—roundish, inclining downwards, alternately plunged lengthwise into the Dissepiment. The Receptacle linear, surrounding the Dissepiment, and immersed in the Sutures of the Pericarpium. The Orders are two, viz.

ORDER I. SILICULOSA, comprehending those Plants whose Pericarpium is a Silicula*. This Order contains fourteen Genera, viz. *Myagrum*, *Vella*, *Anastatica*, *Subularia*, *Draba*, *Lepidium*, *Thlapsi*, *Cochlearia*, *Iberis*, *Alyssum*, *Peltaria*, *Clypeola*, *Biscutella*, and *Lunaria*.

ORDER II. SILIQUOSA, comprehending those Plants whose Pericarpium is a Siliqua†. This Order contains seventeen Genera, viz. *Ricotia*, *Dentaria*, *Cardamine*, *Sisymbrium*,

* See the Account of this Order in Chap. 3.

† See Chap. 3.

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Erysimum, Cheiranthus, Heliophila, Hesperis, Arabis, Turritis, Brassica, Sinapis, Raphanus, Bunias, Isatis, Crambe, and Cleome.

C H A P. XIX.

Of the sixteenth Class, MONADELPHIA.*

THIS Class consists of such Plants as bear Hermaphrodite Flowers, furnished with *one* Set of *united* Stamina. The Characters of the Flowers are as follow.

Characters of the Class MONADELPHIA.

CALYX—A Perianthium always present, persisting, and in most Genera double.

COROLLA—Pentapetalous, the Petals heart-shaped; the Sides of which lap each one over the next, contrary to the Motion of the Sun.

STAMINA—The Filaments united below, but distinct upwards if there be more

* In this Class the Calyx is of great Moment for distinguishing the Genera, and fixes the Limits with Certainty. They were formerly distinguished by the Fruit; which not being found sufficient, recourse was had to the Leaves of the Plant. The Plants of this Class are esteemed to be emollient, and mucilaginous.

than

than one ‡. The exterior ones shorter than the interior. The Antheræ incumbent.

PISTILLUM—The Receptacle of the Fructification prominent in the Centre of the Flower. The Germen erect, surrounding the Top of the Receptacle in a jointed Ring. The Styles are all united below in one Substance with the Receptacle, but divided above into as many Threads as there are Germen. The Stigma spreading and thin.

PERICARPIUM—A Capsule divided into as many Locuments as there are Pistilla. Its Figure various in the different Genera.

SEEDS—Kidney-shaped.

The *Corolla* in this Class has been called *Monopetalous*; but as the Petals are all distinct at the Base, it is to be styled more properly *Pentapetalous*, notwithstanding the Petals cohere by the Union of the Stamina. The Orders are five viz.

ORDER I. *PENTANDRIA*, comprehending such Plants as have *five* Stamina. This Order contains four Genera, viz. *Waltheria*, *Lerchea*, *Hermannia*, and *Melochia*.

‡ The *Melochia* has five Antheræ, but it does not appear that there are any distinct Filaments. See its Character in the Genera Plantarum.

ORDER II. *DECANDRIA*, comprehending such Plants as have *ten* Stamina. This Order contains three Genera, viz. *Conarus*, *Hugonia*, and *Geranium*.

ORDER III. *ENDECANDRIA*, comprehending such Plants as have eleven Stamina. Of this Order there is only one Genus, viz. *Brownea*.

ORDER IV. *DODECANDRIA*, comprehending such Plants as have *twelve* Stamina. This Order contains only *one* Genus, viz. *Pentapetes*.

ORDER V. *POLYANDRIA*, comprehending such Plants as have *many* Stamina. This Order contains *seventeen* Genera, viz. *Bombax*, *Sida*, *Adansonia*, *Althæa*, *Alcea*, *Malva*, *Lavatera*, *Malope*, *Urena*, *Gossypium*, *Hibiscus*, *Stewartia*, *Camellia*, *Morisonia*, *Mesua*, *Malachra*, and *Gordonia*.

CHAP. XX.

Of the seventeenth Class, DIADELPHIA.*

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnished with *two* Sets of *united* Stamina†. The Characters of the Fructification are as follow.

* The Plants of the Class, *Diadelphia*, are the *Papilionaceous*, *Butterfly-shaped* Plants, of *Tournefort*; *irregular tetrapetalous* of *Rivinus*; and *leguminous* of *Ray's Hist. Plant*, 883. Of all the Classes, this is the most natural, and has its Flowers of the most singular Structure. The Calyx, though hitherto little attended to, is of great Moment for fixing the Genera. The Legumen was held of consequence by other Systematists; but by *Linnaeus* it is made of less Account. The Leaves of these Plants are Food for Cattle, and the Seeds also for Quadrupeds of the same Kind; the latter are accounted flatulent.

† This Circumstance, implied in the Title, does not hold through the Class, the Plants given under the first Distinction of the third Order, having *monadelphious* Stamina; the Class is therefore not so properly to be fixed from its Title, as by the *papilionaceous* Corolla, and other Characters of the Fructification. It may be observed likewise, that in the *diadelphious* Flowers of this Class, one of the two Stamina is not a Set of *united* Filaments as in the other, but only a *single* Stamen, detached from the united Set. See the Characters of the Fructification.

Cha-

Characters of the Class DIADELPHIA.

CALYX—A Perianthium monophyllous, campanulate, and withering. The Base gibbous, the lower Part thereof fastened to the Peduncle, the upper obtuse and melliferous. The Brim quinquedentate, acute, erect, oblique, unequal. The lowest odd Denticle longer than the rest; the upper Pair shorter and farther asunder. The Bottom of the Cavity moist with a melleous Liquor, including the Receptacle.

COROLLA—Termed Papilionaceous, unequal; the Petals expressed by distinct Names, viz.

Vexillum, the *Standard*; a Petal covering the rest, incumbent, greater, plano-horizantal, inserted by its Claw in the upper Margin of the Receptacle, approaching to a circular Figure when it leaves the Calyx, and nearly entire; along it, and especially towards its Extremity, runs a Line, or Ridge, that rises up, as if the lower Part of the Petal had been compressed; the Part of the Petal next to the Base approaching to a semicylindric Figure, embraces the Parts that lye under it. The Disk of the Petal is depressed on each Side, but the Sides of it nearest the
Margin

Margin are reflexed upwards. Where the halved Tube ends, and the halved Limb begins to unfold itself, are two concave Impressions prominent underneath, and compressing the Wings, that lie under them.

Alæ, the *Wings*, two equal Petals, one at each Side of the Flower, placed under the Vexillum; incumbent with their Margins parallel, roundish, or oblong, broader upwards, the upper Margin straighter, the lower spreading more into a Roundness; the Base of each Wing bifid, the lower Division stretching out into a Claw, inserted in the Side of the Receptacle, and about the Length of the Calyx; the upper shorter and inflexed.

Carina, the *Keel*, the lowest Petal, often Bipartite, placed under the Vexillum and between the *Alæ*, boat-shaped, concave, compressed on the Sides, set like a Vessel afloat, mutilate at the Base, the lower Part of which runs into a Claw of the Length of the Calyx, and inserted in the Receptacle, but the upper and side Laciniae are interwoven with that Part of the *Alæ* that is of the same Shape. The Form of the Sides of the *Carina*, is much like that of the *Alæ*; and so also is their Situation, except that they

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they are lower, and stand within them. The Line that forms the *Carina* or *Keel*, in this Petal, runs streight as far as the Middle, and then rises gradually in the Segment of a Circle, but the marginal Line runs straight to the Extremity, where meeting the carinal, they terminate obtusely.

STAMINA—Called *Diadelphia*. The Filaments two, of different Forms, viz: a lower one that involves the Pistillum, and an upper one incumbent on it. The former of these, from the Middle downwards, is cylindraceous, membranaceous, and split lengthwise on its upper Side; but the upper Half terminates in nine subulate* Parts, that are of the same Length with, and follow the Flexure of the Carina of the Corolla, and of which the intermediate or lower Radii† are longer by alternate Pairs. The upper Filament is subulato-fetose‡, covering the splitting of the former cylindraceous Filament, incumbent on it, answering to it in Situation, simple and gradually shorter; its Base is detached from the rest, and prepares an Outlet for the Honey on each Side. The

* Awl-shaped.

† Rays, meaning the Divisions of the Filaments.

‡ Awl-shaped, and like a Bristle.

Antheræ

Antheræ reckoned all together are ten, one on the upper Filament, and nine on the lower, each of the Radii being furnished with a single one ; they are small, all of one Size, and terminate the Radii.

PISTILLUM—Single, growing out of the Receptacle, within the Calyx. The Ger-men oblong, roundish, lightly compressed, straight, of the Length of the Cylinder of the lower Filament which involves it. The Style subulate, filiform, ascending, having the same Length and Position as the Radii of the Filament among which it is placed, and withering. The Stigma downy, of the Length of the Style from the Part turned upwards, and placed immediately under the Antheræ.

PERICARPIUM—A Legumen, oblong, compressed, obtuse, bivalved, with a longitudinal Suture both above and below ; each Suture straight, though the upper one falls near the Base, and the lower one rises near the Top. The Legumen opens at the upper Suture.

SEEDS—A few, roundish, smooth, fleshy, pendulous, marked with an Embrio that is a little prominent towards the Point
of

of Infertion. When the Ova * are hatched, the Cotyledons † preserve the Form of the halved Seed.

RECEPTACLE—The proper Receptacles of the Seeds are very small, very short, thinner towards the Base, obtuse at the Disk that fastens them, oblong, inserted longitudinally in the upper Suture of the Legumen only, but placed alternate; so that when the Valvulæ have been parted, the Seeds adhere alternately to each of the Valves.

The ordinary Situation of the Flowers is obliquely pendulous; that is, at an acute Angle from the Perpendicular. The Orders are *four*, viz.

ORDER I. *PENTANDRIA*, comprehending such Plants as have *five* Stamina. Of this Order there is only one Genus, viz. *Monniera*.

ORDER II. *HEXANDRIA*, comprehending such Plants as have *six* Stamina. This

* Eggs, meaning the Seeds themselves, which answer to the Eggs of Animals, and are as it were hatched when the Corculum, or first Principle of the new Plant begins to strike Root and vegetate. See Part I. Chap. 7.

† Side Leaves of the Seed. See Part I. Chap. 7. The two Seed Leaves, which first appear above Ground, are these very Cotyledons, which are brought up with the Plant after the Corculum has struck; and it is these Seed Leaves that are here spoken of.

Order

Order contains *two* Genera, viz. *Fumaria*, and *Saraca*.

ORDER III. *OCTANDRIA*, comprehending such Plants as have *eight* Stamina. This Order contains *two* Genera, viz. *Polygala*, and *Securidaca*.

ORDER IV. *DECANDRIA*, comprehending such Plants as have *ten* Stamina. This Order contains forty-nine Genera, distinguished into, 1. Such as have *monodelphious* * Filaments; of which there are seventeen, viz. *Nissolia*, *Erythrina*, *Piscidia*, *Borbonia*, *Spartium*, *Genista*, *Aspalathus*, *Amorpha*, *Crotolaria*, *Ononis*, *Anthyllis*, *Ebenus*, *Abrus*, *Pterocarpus*, *Ulex*, *Arachis*, and *Lupinus*. 2. Such as have *Diadelphious* † Filaments and downy Stigma; of which there are ten, viz. *Phaseolus*, *Dolichus*, *Glycine*, *Clitoria*, *Pisum*, *Orobus*, *Latbyrus*, *Vicia*, *Cicer*, and *Ervum*. 3. Such as have *Diadelphious* Filaments, bilabiate Calyces, and the Stigma not downy; of which there are six, viz. *Cytisus*, *Geoffroya*, *Robinia*, *Colutea*, *Glycirrhiza*, and *Coronilla*. 4. Such as have *Diadelphious* Filaments, Stigma that are not downy, and Calyces not bilabiate; of which

* One Set, or Brotherhood.

† Two Sets, or Brotherhoods.

there are sixteen, viz. *Ornithopus*, *Hippocrepis*, *Scorpiurus*, *Hedysarum*, *Æschynomene*, *Indigofera*, *Galega*, *Phaca*, *Astragalus*, *Biserrula*, *Pforalea*, *Trifolium*, *Lotus*, *Liparia*, *Trigonella*, and *Medicago*.

C H A P. XXI.

Of the eighteenth Class, POLYADELPHIA.

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, furnish with *many* Sets of *united* Stamina; the Flowers have no particular Character farther than is expressed in the Title. The Orders are four, viz.

ORDER I. *PENTANDRIA*, comprehending such Plants as have *five* Stamina in each Set. Of this Order there is but *one* Genus, viz. *Theobroma*.

ORDER II. *DODECANDRIA*, comprehending such Plants as have *twelve* Stamina in each Set. Of this Order there is but *one* Genus, viz. *Monsonia*.

ORDER III. *ICOSANDRIA*, comprehending such Plants as have *twenty* Stamina
in

in each Set. Of this Order there is but *one* Genus, viz. *Citrus*.

ORDER IV. *POLYANDRIA*, comprehending such Plants as have *many* Stamina in each Set. This Order contains *eight* Genera, viz. *Hypericum*, *Ascyrum*, *Hopea*, *Symplocos*, *Melaleuca*, *Durio*, *Munchbausea*, and *Glabraria*.

C H A P. XXII.

Of the nineteenth Class, SYNGENESIA.*

THIS Class consists of such Plants as bear *Compound* Flowers. We have already paved the way for understanding this Class, by the account given of *Compound* Flowers in Part I. Chap. 19. and the Explanation of the Titles of the Class and its Orders in Chap. 2. and 3. What is farther necessary here, is to give the Characters of the Flowers. *Compound* Flowers admit of a double Description, viz. of the whole Flower in its aggregate State, which is termed the *Flosculose Flower*; and 2. of

+ This Class of *Compound* Flowers is a natural one, if we except the last Order; which upon the systematic Principles assumed, could not be refused an Admission into it. Its Plants are commonly bitter and stomachic.

the *Flosculi*, *Florets*, of which it is composed. We shall begin with the first, which concerns only the Calyx and Receptacle, those being the only Parts that are in common.

Characters of the *Flosculose Flower*.

CALYX—The common Calyx is a Perianthium, which contains the Florets and the Receptacle. It is either *simple*, *augmented*, or *imbricated**. It contracts when the Flowers are fallen, but expands and turns back when the Seeds are ripe.

RECEPTACLE—The common Receptacle of the Fructification receives many sessile Florets on its Disk, which is either *concave*, *plane*, *convex*, *pyramidal*, or *globose*. The Surface of the Disk is either naked, without any other inequality than that of being lightly dotted; *Villose*, covered with upright Hairs; or *Paleaceous*, covered with *Paleæ*, *Chaffs*, or *Straws*, that are linear, subulate, compressed, and erect, and serve to part the Florets.

Characters of the *Florets*†.

CALYX—A small Perianthium, often quinquepartite, seated on the Germen, persisting,

* See these Terms explained in Part. I. Chap. 11.

† The Character here given is of an *Hermaphrodite Floret*;

sisting, and becoming the Crown of the Seed.

COROLLA—Monopetalous with a long and very narrow Tube. It is seated on the Germen, and is either *tubulate*, with the Limb campanulate and quinquefid, and the Laciniaë spreading and turning back; *ligulate*, with the Limb linear, plane, turned outwards, and the Top whole; *tridentate*, or *quinquedentate*; or wanting, having no Limb, and often no Tube.

STAMINA—The Filaments five, capillary, very short, inserted in the Neck of the Corollulæ. The Antheræ five, linear, erect; and by the Union of their Sides forming a Cylinder, that is tubulate, quinquedentate, and of the Length of the Limb.

PISTILLUM—The Germen oblong, placed under the Receptacle of the Flower; the Style filiform, erect, of the Length of the Stamina, and perforating the Cylinder of the

ret; but the Florets may also be either *Male*, *Female*, or *Neuter*, as the Orders shew; it may not be improper therefore to observe, in general, upon these Classic characters, which our Author has drawn with such minute Exactness, that they should be understood as collected only from the Circumstances that most frequently occur in the Class, and liable to Variation, not in particular Genera only, but even through the whole Orders of the Class in some Cases.

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Antheræ; the Stigma bipartite, the Laciniaë revolute and spreading asunder.

PERICARPIUM—No true one, though in some there is a coriaceous* Crust.

SEED—A single one, oblong, often tetragonous, but commonly narrower at the Base. It is either crowned, or with the Crown wanting. The Crown is of two Kinds, either a Pappus, or a Perianthium; if a Pappus, it is either sessile, or placed on a Stipes; and consists of many Radii, that are placed in a round, and are either simple, radiate, or ramose; when the Crown is a Perianthium, it is such as is described above under that Head.

The Essence of a *Flosculose* Flower consists in having the Antheræ united in a Cylinder, and a single Seed below the Receptacle of the Floret †. The Orders of this Class are six, viz.

* Leathery.

† That the Essence of a *flosculose* or compound Flower does not consist either in the common Calyx or Receptacle Linnaeus argues from hence, That the common Calyx is wanting in *Echinops*, and the common Receptacle in *Milleria*, though both those Genera belong to this Class; and that on the other Hand, the common Calyx is found in *Scabiosa*, and the common Receptacle in *Dipsacus*, both which Plants belong to the Class *Tetrandria*, tho' they have, with the *Gomphrena* and others, been falsely ranged with the compound Flowers.

ORDER

ORDER II. *POLYGAMIA SUPERFLUA*,
comprehending such Plants as have the Flo-
rets of the *Disk Hermaphrodite*, and those of
the Radius female. This Order contains
thirty-six Genera, distinguished into 1. *Tu-
bulose*; of which there are eight, viz. *Tana-
cetum*, *Artemisia*, *Gnaphalium*, *Xeranthemum*,
Carpesium, *Baccharis*, *Cotula*, and *Conyza*.
2. *Radiate*; of which there are twenty-eight,
viz. *Erigeron*, *Tussilago*, *Senecio*, *Aster*, *Soli-
dago*,

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dago, Inula, Cineraria, Arnica, Doronicum, Perdicium, Helenium, Bellis, Leysera, Tagetes, Pectis, Chrysanthemum, Matricaria, Anacyclus, Anthemis, Achillea, Tridax, Zinnia, Verbena, Sigesbeckia, Bupthalmum, Eclipta, Bellium, and Amellus.

ORDER III. *POLYGAMIA FRUSTRANEA*, comprehending such Plants as have the Florets of the *Disk Hermaphrodite*, and those of the *Radius* neuter. This Order contains seven Genera, all *radiate*, viz, *Helianthus, Rudbeckia, Coreopsis, Gorteria, Osmites, Zoegea*, and *Centaurea* *.

ORDER IV. *POLYGAMIA NECESSARIA*, comprehending such Plants as have Flowers of the *Disk* male, and those of the *Radius* female. This Order contains fourteen Genera, most of which are *radiate*, viz. *Mil-leria, Silphium, Chrysogonum, Melampodium, Calendula, Arctotis, Osteospermum, Othonna, Polymnia, Eriocephalus, Filago, Micropus, Baltimora*, and *Hippia*.

* The Corollulæ of the *Centaurea*, are all *tubulose*, but those of the *Radius* differ from those of the *Disk*, which brings it within the Definition of a *radiate* Flower; however, *Linnaeus* in his Description of the *Centaurea*, in the Genera Plantarum, has not called the Corolla *radiate*, but *tubulosa difformis, tubulose of different Forms*.

ORDER

ORDER V. *POLYGAMIA SEGREGATA*. This Order comprehends such Plants as have *many* partial Cups contained in the common Calyx, which separate and surround the Flosculi. This Order contains six Genera, distinguished into, 1. Such as have four Flosculi in each partial Calyx; of which there are two Genera, viz. *Elephantopus*, and *Oedera*. 2. Such as have *many* Flosculi in each partial Calyx; of which there is only one Genus, viz. *Sphæranthus*. 3. Such as have one Flosculus in each partial Calyx; of which there are three Genera, viz. *Echinops*, *Gundelia*, and *Stoebe*.

ORDER VI. *MONOGAMIA*, comprehending such Plants as have *simple* Flowers. This Order contains seven Genera, viz. *Strumpfia*, *Seriphium*, *Corymbium*, *Jassione*, *Lobelia*, *Viola*, and *Impatiens*.

C H A P. XXIII.

Of the twentieth Class, GYNANDRIA.*

THIS Class consists of such Plants as have the *Stamina* growing either upon the *Style* itself, or upon a *Receptacle* that stretches out into the Form of a *Style*, and supports both the *Stamina* and the *Pistillum*. The Orders are eight, viz.

ORDER I. *DIANDRIA* †, comprehending such Plants as have *two* *Stamina*. The Flowers of this Order have a most singular Structure, answering to the following Description.

Characters of the Order *DIANDRIA*, of the Class *GYNANDRIA*.

The *Germen* is always contort ‡; the *Petals* are five; of which the two inner ones

* All the Flowers of this Class have a monstrous Appearance, owing to the uncommon Situation of the Parts of Frustrification.

† This Order is a natural one, the Genera differing only in respect of the Nectarium. This Part *Linnaeus* considers as a mark of Distinction for these Genera, far preferable to the Root, tho' not received as such by former Botanists.

‡ Twisted like a Screw.

usually

usually approach, and form a Galea ‡; the lower Lip of which becomes a Nectarium, and serves also for a Pistillum and sixth Petal. The *Style* grows to the inner Margin of the Nectarium in such a Manner, as to be with its Stigma scarce either of them distinguishable. The *Filaments* are always two, supporting as many *Antheræ*; which are narrower downwards; naked, or without Tunic, and divisible, like the Pulp of a *Citrus*. These last are covered by little Cells, that are open underneath, and grow to the inner Margin itself of the Nectarium. The *Fruit* is a Capsule, that is unilocular, trivalved, and splits in the Angles under the Carinate † Ribs. The Seeds are scobiform*, numerous, affixed to a linear Receptacle in each Valvule.

This Order contains *nine* Genera, viz. *Orchis*, *Satyrium*, *Ophrys*, *Serapias*, *Limodorum*, *Arethusa*, *Cypripedium*, *Epidendrum*, and *Gunnera*.

ORDER II. *TRIANDRIA*, comprehending such Plants as have *three* Stamina. This Order contains four Genera, viz. *Sisyrinchium*, *Ferraria*, *Stilago*, and *Salacia*.

‡ Helmet.

† Keel shaped.

* Like Filings or Saw-dust, *i. e.* very small.

ORDER III. *TETRANDRIA*, comprehending such Plants as have *four* Stamina. Of this Order there is but one Genus, viz. *Nepenthes*.

ORDER IV. *PENTANDRIA*, comprehending such Plants as have *five* Stamina. This Order contains *three* Genera, viz. *Paffiflora*, *Gluta*, and *Ayenia*.

ORDER V. *HEXANDRIA*, comprehending such Plants as have *six* Stamina. This Order contains two Genera, viz. *Aristolochia*, and *Pistia*.

ORDER VI. *DECANDRIA*, comprehending such Plants as have *ten* Stamina. Of this Order there are but *two* Genera, viz. *Helicteres*, and *Kleinbovia*.

ORDER VII. *DODECANDRIA*, comprehending such Plants as have *twelve* Stamina. This Order contains but one Genus, viz. *Cytinus*.

ORDER VIII. *POLYANDRIA*, comprehending such Plants as have *many* Stamina. This Order contains *eight* Genera, viz. *Grewia*, *Xylophia*, *Arum*, *Dracontium*, *Calla*, *Pothos*, *Ambrosinia*, and *Zostera*.

C H A P. XXIV.

Of the twenty-first Class, MONOECIA.

THIS Class consists of such Plants as have no *Hermaphrodite* Flowers, but bear both *male* and *female* Flowers on the same Plant *. The Orders of this Class are *eleven*, viz.

ORDER I. *MONANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *one* Stamen. This Order contains five Genera, viz. *Zanichellia*, *Ceratocarpus*, *Cynomorium*, *Elaterium*, and *Chara*.

ORDER II. *DIANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *two* Stamina. This Order contains two Genera, viz. *Lemna*, and *Anguria*.

ORDER III. *TRIANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *three* Stamina. This Order contains twelve Genera, viz. *Omphalea*, *Typha*, *Sparganium*, *Zea*, *Coix*, *Tripsacum*, *Oly-*

* These are the Androgynous Plants. See Part I. Chap. 21.

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ra, Carex, Axyris, Tragia, Hernandia, and Phyllanthus.

ORDER IV. *TETRANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *four* Stamina. This Order contains eight Genera, viz. *Centella, Betula, Buxus, Urtica, Morus, Cicca, Serpicula, and Littorella.*

ORDER V. *PENTANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *five* Stamina. This Order contains eight Genera, viz. *Xanthium, Ambrosia, Parthenium, Iva, Leea, Amaranthus, Nephelium, and Clibadium.*

ORDER VI. *HEXANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *six* Stamina. Of this Order there are *two* Genera, viz. *Zizania, and Pharus.*

ORDER VII. *HEPTANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *seven* Stamina. Of this Order there is but one Genus, viz. *Guettarda.*

ORDER VIII. *POLYANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *many* Stamina. This Order contains thirteen Genera, viz. *Ceratophyllum, Myriophyllum, Sagittaria, Begonia, Theligonum, Poterium, Quercus, Juglans, Fagus, Car-*

Carpinus, Corylus, Platanus, and Liquidambar.

ORDER IX. *MONADELPHIA*, comprehending such Plants as have their *male* Flowers furnished with *one* Set of *united* Stamina. This Order contains fifteen Genera, viz. *Hura, Pinus, Cupressus, Thuja, Acalypha, Delechia, Plukenetia, Cupania, Croton, Ricinus, Jatropha, Sterculia, Hippomane, Stillingia, and Gnetum.*

ORDER X. *SYNGENESIA*, comprehending such Plants as have their *male* Flowers furnished with Stamina, of which the *Antheræ* are *united*. This Order contains six Genera, viz. *Trichosanthes, Momordica, Cucumis, Cucurbita, Sicyos, and Bryonia.*

ORDER XI. *GYNANDRIA*, comprehending such Plants as have their *male* Flowers furnished with Stamina that grow out of a Kind of *Style*, or imperfect *Pistillum*, the perfect one being in the female Flower. This Order contains two Genera, viz. *Andrachne, and Agyneia.*

C H A P. XXV.

Of the twenty-second Class, DIOECIA.

THIS Class consists of such Plants as have no *Hermaphrodite* Flowers, but bear *male* and *female* Flowers on *distinct* Plants*. The Orders of this Class are fourteen, viz.

ORDER I. *MONANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *one* Stamen. This Order contains but one Genus, viz. *Najas*.

ORDER II. *DIANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *two* Stamina. This Order

* There are many Plants which have male and female Flowers on *distinct* Plants ; but which are not admitted to this Class, because this Circumstance happens to one Species only, and not to the whole Genus. Instances of this are met with in *Morus*, *Urtica*, *Laurus*, *Croton*, *Rumex*, *Silene*, *Carex*, *Rhus*, *Valeriana*, *Rhamnus*, and *Cucubulus*. But it is observable, that in the Plants that stand under the first Distinction, in the Order *Monogynia* of the Class *Pentandria*, which are the *Asperifolia* (*rough-leaved Plants*) of Ray, and also in the Plants of the Classes *Didynamia*, *Tetradynamia*, and *Diadelphia*, there have not been found any Species where the Sexes are on distinct Plants : This may be accounted for from the Structure of the Flowers in those Classes.

contains

contains three Genera, viz. *Vallisneria*, *Salix*, and *Cecropia*.

ORDER III. *TRIANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *three* Stamina. This Order contains five Genera, viz. *Empetrum*, *Osyris*, *Caturus*, *Excoecaria*, and *Restio*.

ORDER IV. *TETRANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *four* Stamina. This Order contains five Genera, viz. *Viscum*, *Hippophaë*, *Myrica*, *Trophis*, and *Batis*.

ORDER V. *PENTANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *five* Stamina. This Order contains twelve Genera, viz. *Pistacia*, *Zanthoxylum*, *Astronium*, *Iresine*, *Antidesma*, *Spinacia*, *Acnida*, *Cannabis*, *Humulus*, *Zanonia*, *Fewillea*, and *Canarium*.

ORDER VI. *HEXANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *six* Stamina. This Order contains four Genera, viz. *Tamus*, *Smilax*, *Rajania*, and *Dioscorea*.

ORDER VII. *OCTANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *eight* Stamina. This Order contains two Genera, viz. *Populus*, and *Rhodiola*.

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Order VIII. *ENNEANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *nine* Stamina. This Order contains two Genera, viz. *Mercurialis* and *Hydrocharis*.

ORDER IX. *DECANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *ten* Stamina. This Order contains four Genera, viz. *Carica*, *Kiggelaria*, *Coriaria*, and *Schinus*.

ORDER X. *DODECANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *twelve* Stamina. This Order contains three Genera, viz. *Menispermum*, *Datisca*, and *Euclea*.

ORDER XI. *POLYANDRIA*, comprehending such Plants as have their *male* Flowers furnished with *many* Stamina. Of this Order there is but one Genus, viz. *Clifortia*.

ORDER XII. *MONADELPHIA*, comprehending such Plants as have their *male* Flowers furnished with *one* Set of *united* Stamina. This Order contains six Genera, viz. *Taxus*, *Juniperus*, *Ephedra*, *Cissampelos*, *Napæa* and *Adelia*.

ORDER XIII. *SYNGENESIA*, comprehending such Plants as have their *male* Flow-

ers

ers furnished with Stamina of which the *Antheræ* are united. Of this Order there is but one Genus, viz. *Ruscus*.

ORDER XIV. *GYNANDRIA*, comprehending such Plants as have their *male* Flowers furnished with Stamina that grow out of a Kind of *Style*, or *imperfect Pistillum*, the *perfect* one being in the female Flower. Of this Order there is but one Genus, viz. *Clusia*.

CH A P. XXVI.

Of the twenty-third Class, POLYGAMIA.

THIS Class consists of such Plants as bear *Hermaphrodite* Flowers, and also either *male* or *female* Flowers, or *both*. The Orders of this Class are *three*, viz.

ORDER I. *MONOECIA*, comprehending such Plants as have the Polygamy on the *same* Plant. This Order contains twenty-four Genera, distinguished into, 1. Such as are *Polygamous* by *male Hermaphrodites*, and *female Hermaphrodites*; of which there is

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but

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but one Genus, viz. *Musa*. 2. By *Hermaphrodites* and *Males*; of which there are twenty-two, viz. *Ophioxylon*, *Celtis*, *Verastrum*, *Fusanus*, *Andropogon*, *Holcus*, *Apluda*, *Ischæmum*, *Cenchrus*, *Ægilops*, *Valantia*, *Parietaria*, *Atriplex*, *Brabeium*, *Acer*, *Gouania*, *Solandra*, *Terminalia*, *Clusia*, *Hermas*, *Spinifex*, and *Manisfurus*. 3. By *Hermaphrodites*, and *Females*; of which there is one Genus, viz. *Mimosa*.

ORDER II. *DIOECIA*, comprehending such Plants as have the Polygamy on *two distinct* Plants. This Order contains *ten* Genera, distinguished into, 1. Such as are Polygamous by *Hermaphrodites* and *Females*; of which there are two, viz. *Fraxinus*, and *Gleditsia* *. 2. By *Hermaphrodites* and *Males*; of which there are three, viz. *Diospyrus*, *Nyssa*, and *Pisonia*. 3. By *Androgynous* and *Males*; of which there are five, viz. *Anthospermum*, *Arctopus*, *Panax*, *Chrysitrix*, and *Stilbe*.

ORDER III. *TRIOECIA*, comprehending such Plants as have the Polygamy on

* In *Gleditsia* the Hermaphrodites and Males are on the same Plant, and the Females on a distinct one.

three distinct Plants. This Order contains two Genera, viz. *Ficus* †, and *Ceratonia*.

† To understand this Order, the singular Manner of the Fruetification must be explained. The Fruit of the *Ficus* is not a *Pericarpium*, but a *Receptacle*, the interior Sides of which support the Flowers, which by this Means are inclosed within it. These Flowers in the cultivated Fig-trees are female only, but there is a Sort known by the Name of *Caprificus*, that has male Flowers, and another again called *Erinosyce*, which is *Androgynous*, having both male and female Flowers distinct, though lodged within the same Receptacle. Here then we have the *Trioeious* Polygamy explained; and if the Descriptions of *de la Hire* may be trusted, there are Figs that contain *Hermaphrodite* Flowers; which give us even a fourth Habitation for the Sexes. Thus much suffices to explain the Order; but there is an Objection naturally arising from hence to the Doctrine of the Sexes; the obviating which, will furnish the Opportunity of a necessary Remark. It will be asked, How it happens that the Fruit of our Fig-trees ripen, if the Plants are of one Sex only, and have no Assistance from the Male? The Answer is this; the Fruit is in all Cases to be distinguished from the Seed contained within it: If the Male be wanting, the Seed will not vegetate when sown, but the Fruit may nevertheless swell, and come to an Appearance of Perfection; and so it is observed to do in the Instance in Question, and in many others, especially where the Fruit is formed of one of the Parts less connected with the Seed; as Calyx, Receptacle, &c. though it is more common for it to drop off before it ripens, if not impregnated by the Male.

C H A P. XXVII.

*Of the twenty-fourth Class, CRYPTO-
GAMIA*.*

THIS Class consists of such Plants as *conceal* their Fructification, having their Flowers either *within* the Fruit, or so *small*, as not to be perceptible to the naked Eye. The Fructification in these is also of an uncommon Structure. The Orders are *four*, viz.

ORDER I. *FILICES*, *Ferns*, comprehending such Plants as are dorsiferous †. What is known of the Fructification of these Plants, amounts only to the few Characters following.

* The Plants of this Class are often of a dangerous quality.

† Bearing the Fruit on the Back of the Leaf. These have been called also *Epiphyllouspermous*, a Greek Compound expressive of the same Circumstance; *Capillary*, as being esteemed good for the Hair; and *Acaules*, without Stems; for in these Plants, what rises out of the Ground is plainly a Leaf only; one of the Characters of a Stem or Trunk is to be alike on every Side; but in the Stalks of Ferns, there is manifestly a Front and Back, the former being flat and channelled, and the latter convex; which shews them to be Leaves.

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Characters of the FILICES.

CALYX—A Squama growing out of the Leaf, opening on one of its Sides ; and under which there are pedunculate Globules ; each Globule is girt with an elastic Ring, which break elastically, and sheds a Dust, which are the Seeds.

This Order contains eighteen Genera ; which, not admitting of any certain Distinction from their Fructification, have been ranged by *Linnaeus* according to their Situation under their covers, and are as follows, viz. *Cycas*, *Zamia*, *Equisetum*, *Onoclea*, *Ophio-glossum*, *Osmunda*, *Acrosticum*, *Pteris*, *Blechnum*, *Hemionitis*, *Lonchitis*, *Asplenium*, *Poly-podium*, *Adiantum*, *Trichomanes*, *Marfilea*, *Pilularia*, and *Isoetes*.

ORDER II. MUSCI, Mosses. The Character of the Plants comprehended under this Title are, Antheræ without Filaments ; the female Flowers distinct, and without any Pistillum ; and the Seeds, consisting only of a naked Corculum, without Cotyledon or Tunic. The Genera of this Order have been distinguished by *Linnaeus*, according to the following Circumstance, viz. The Antheræ, *with* or *without* a Calyptra†, placed on the

• A Veil.

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same

same Plant as the female Floret, or on a *distinct* one; and the female *aggregate*, or *single*. The Order contains eleven Genera, viz. *Lycopodium*, *Porella*, *Sphagnum*, *Phascum*, *Splachnum*, *Polytrichum*, *Mnium*, *Bryum*, *Hypnum*, *Fontinalis*, and *Buxbaumia*.

ORDER III. *ALGÆ*, *Flags*. The Plants comprehended under this Order have their Root, Stem, and Leaf, all in one. The Characters of the Fructification of this Order are not yet known, excepting the few Descriptions given by *Michelius*. The Genera are twelve, viz. *Jungermannia*, *Targionia*, *Marchantia*, *Blasia*, *Riccia*, *Anthoceros*, *Lichen*, *Tremella*, *Fucus*, *Ulva*, *Conserva*, and *Byssus*.

ORDER IV. *FUNGI*, *Mushrooms*. The Genera of this Order are given by *Linnaeus* after the Method of *Dillenius**. The Fructification being imperfectly known, no Character can be assigned for this Order, farther than the Title, which is familiar to every one. The Genera are ten, viz. *Agaricus*,

* *Linnaeus* tells us, he preferred the Method of *Dillenius* for the Fungi to that of *Michelius*; because it was plain to every one; whereas that of *Michelius*, though that Author has thrown great Light upon this Tribe, required too nice an Inspection.

Boletus,

Boletus, Hydnum, Phallus, Clathrus, Helvella, Peziza, Clavaria, Lycoperdon, and Mucor.

C H A P. XXVIII.

Of the APPENDIX.

BESIDES the twenty-four Classes explained in the preceding Chapters. *Linnaeus* has in his *Genera Plantarum*, given an *Appendix*, which in the *Ordo Generum* prefixed to that Work, he calls the twenty-fifth Class*. It contains only one Order, viz.

PALMÆ, comprehending such Plants as have a *Spadix*, and *Spatha*. This Order contains nine Genera, viz. *Chamærops, Borassus, Corypha, Cocos, Phœnix, Elais, Areca, Elate*, and *Caryota*.

* *Linnaeus* in the first Edition of his *Genera Plantarum*, made two Orders in his *Appendix*, which in the last Edition of the *Système Natura*, he has reduced to one, finding, after more mature Examination, all the Plants in his second Order fell naturally under the other Classes, and Orders, to which they properly belonged.

C H A P. XXIX.

Of GENERIC Distinctions.

HAVING now gone through the Explanation of the Classes and Orders of the System, we come to the Distinctions of the Genera. These, by the Theory of the sexual System, are to be regulated by the Fructification only. The Parts of Fructification known to the earlier Botanists were few, and might be well thought insufficient for distinguishing the vegetable Productions of Nature: They therefore had Recourse to the Habit of Plants, and other Circumstances; and by this Means a great Number of Genera were established, which the new System is obliged to reject. Of these we shall give the Reader an ample List of Instances in Chapter 31.

The Fructification being admitted as the only Foundation of the generic Distinctions, all Vegetables that *agree* in their Parts of Fructification are to be put together under one Genus; and all such as *differ* in those Parts are to be divided. The characteristic Mark of each Genus is to be fixed from the Number, Figure, Proportion, and Situation
of

of all the Parts : But as there are few Genera wherein all the Parts are constant in every one of the Species, we ought, wherever it is possible, to fix upon some one single Circumstance that is constant, and make it the *essential* Character. This in most Genera may be had : Thus the Essence of *Prunella*, *Torenia*, *Euphrasia*, *Alyssum*, and *Crambe*, lies in the Denticles of the Stamina ; that of *Curcuma*, *Chelone*, *Bignonia*, and *Martynia* in a mutilate Stamen ; the *Ranunculus* is distinguished by its Nectarium, which is a Pore in the Claws of its Petals ; *Hydrophyllum* by the same Part, which in that Genus is a closed Chink in the Laciniae of the Corolla ; and *Helleborus* and *Nigella* also, by their tubulose Nectaria ; in *Pancratium* the Stamina are inserted in the Nectarium, which distinguishes it from *Narcissus* ; in *Hyoscyamus*, there is a Covering to the Capsules, by which it is known from *Physalis* ; the *Reseda* has always a lateral Nectarium, but varies in its Corolla and Pistillum ; the *Campanula* has a quinquevalved Nectarium, but is inconstant in the Corolla and Capsule ; and lastly, the *Iris* has a Stigma of singular Construction, but varies in the Beard of its Corolla.

There is, however, no one Part of Fructification

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tification that can be relied on as a constant characteristic Mark for all Genera ; it being found, that the Part which is constant in some Genera will be inconstant in others : Thus in *Carica* the Flowers of the male Plant are monopetalous, and those of the female pentapetalous ; in *Myrica* some Species have naked Seeds, others Berries ; in *Fraxinus* some have a naked Flower, and others a Corolla ; in *Geranium* some have regular Corollæ, and others irregular ; in *Linum* some are pentapetalous, others tetrapetalous ; in *Aconitum* some are tricapsular, and others quinquecapsular ; and in *Trifolium* some are monopetalous, others polypetalous, some monospermous, and others polyspermous.

This Inconstancy of particular Parts in many Genera has been another Source of Error amongst the earlier Botanists ; who have parted many Plants from their Congeners on this Account : Of these Mistakes we shall give an ample List in Chapter 32.

When the characteristic Mark of any Genus is wanting in any particular Species, we should proceed with Caution, lest we confound Genera that should be distinguished : For want of this Caution, the *Erica* and *Andromeda* had been joined, but were parted afterwards on Account of the two Horns in
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the Antheræ of the *Erica*; the *Adonis* had been joined to the *Ranunculus*, but was parted from it again, on observing that it wanted the nectariferous Pore; and the *Aloe* and *Agave* had been blended, till it was observed that in the latter the Stamina were inserted in the Corolla, and not in the Receptacle.

When the characteristic Mark of any Genus is observed in some Species of another Genus near of Kin to it, a like Caution is again necessary on the other Hand, lest we should multiply the Genera by parting Species that should stand together: Thus we find, that in *Sedum*, *Sempervivum*, *Rhodiola*, *Crassula*, *Tillæa* and *Cotyledon*, the Nectaria adhere to the Base of the Pistillum; in *Epilobium* and *Oenothera* the Calyx is tubulose; in *Mespilus*, *Cratægus*, and *Sorbus*, the Structure of the Flower is alike; and in both *Alnus*, and *Betula*, there are three Florets on the Foliole of the Amentum *.

* The *Alnus* and *Betula* are joined by *Linnaeus* under the Title of *Betula*. The rest of these Instances he has kept separate, notwithstanding the Doubt raised here concerning the Propriety of distinguishing them.

C H A P. XXX.

By what Parts of Fructification the GENUS may with the most Certainty be determined.

THE more constant any Part of the Fructification is found through the several Species of any Genus, the more it may be relied on with Certainty as a characteristic Mark for that Genus: Thus in *Hypecoum* the Nectarium is constant, but not the *Siliqua*; the *Convallaria* is constant in its *spotted Berry*, but not in its *Corolla*; the *Lobelia* in its *Corolla*, but not in its *Fruit*; the *Cassia* in its *Corolla*, but not in its *Siliqua*; and the *Verbena* in its *Calyx* and *Corolla*, but not in its *Stamina* and *Seeds*.

In some Genera one Part of the Fructification is found to be the most constant, and in others another; but there is no Part that is not liable sometimes to a Variation: Thus we find the *Pericarpium* variable in *Impatiens*, *Campanula*, *Primula*, *Papaver*, *Cistus*, *Fumaria*, and *Arbutus*; the *Calyx* in *Nymphæa*, and *Cornus*; the *Corolla* in *Vaccinium*, *Convallaria*, *Andromeda*, *Gentiana*, and *Linum*; and the *Seeds* in *Ranunculus*, and *Alisma*.

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If the *Flowers* agree, but the *Fruits* differ, the Genus ought not to be parted : Thus in those extensive Genera, the *Cassia*, *Hedysarum*, *Sophora*, *Lavatera*, *Hibiscus*, and *Mimosa*, so great a Number of Species have been ranged under the same Genus, on Account of the Conformity in the Flowers, though there is a Variation in the Fruit.

That the *Figure* of the *Flowers* is more certain than that of the *Fruit*, appears from many Examples; as from *Campanula*, *Primula*, *Antirrhinum*, *Alisma*, *Hibiscus*, *Cistus*, &c. but the *Proportion* of the Parts is subject to very great Variation.

The *Number* of the Parts is more liable to Variation than their *Figure*, and is found sometimes to vary even upon the same Plant; as in *Ruta*, *Chrysosplenium*, *Monotropa*, *Tetragonia*, *Euonymus*, *Philadelphus*, and *Adoxa*, in the Flowers of all which the Number of the Parts varies from *five* to *four* : In these doubtful Cases, the natural Number must be collected from the primary Flower; but in the Variations of the *Number* of the Parts, there is a proportional Affinity worth remarking. In *Flowers* the Stamina usually vary from ten to eight, and from five to four; the Corolla and Calyx from five to four, and the whole Flower from four to three; and the

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the *Fruit* also usually varies from five to three, and from five to four.

The *Situation* of the Parts is the most constant, very rarely varying in the same Genus.

The *Regularity* of the *Petals* is not so much to be depended on as some former Botanists have * thought ; for we see in *Geranium* the *European* Species have regular Corollæ, but the *African* ones irregular.

The *Nectarium* Nature has made of the greatest Consequence. This Part, which had not even a Name till *Linnaeus* had distinguished it, is a decisive Mark in all the following Genera, viz. in *Orchis*, *Satyrium*, *Monotropa*, *Fumaria*, *Viola*, *Malpighia*, *Banisteria*, *Adenantha*, *Commelina*, *Laurus*, *Helxine*, *Distamnus*, *Zygophyllum*, *Swertia*, *Lilium*, *Fritillaria*, *Hydrophyllum*, *Ranunculus*, *Hermannia*, *Berberis*, *Staphylea*, *Passiflora*, *Narcissus*, *Pancratium*, *Mirabilis*, *Nerium*, *Stapelia*, *Asclepias*, *Diosma*, *Campanula*, *Plumbago*, *Hyacinthus*, *Rhododendrum*, *Cheiranthus*, *Sinapis*, *Kiggelaria*, *Clusia*, *Aquilegia*, *Nigella*, *Aconitum*, *Parnassia*, *Epimedium*, *Theobroma*, *Reseda*, *Grewia*, *Helleborus*, *Isopyrum*, *Tropæolum*, and *Impatiens*.

* Rivinus in particular.

The *Stamina* and *Calyx*, being less subject to Luxuriancy, are far more certain than the *Petals*.

The *Corolla* varies as to its Figure in many Genera; as in *Vaccinium*, *Pyrola*, *Andromeda*, *Nicotiana*, *Menyanthes*, *Primula*, *Veronica*, *Gentiana*, *Hyacinthus*, *Scabiosa*, and *Narcissus*. It varies also as to Number, being in *Ranunculus*, Pentapetalous in some Species, and Polypetalous in others; in *Helleborus* also, Pentapetalous and Polypetalous; in *Statice*, Pentapetalous and Monopetalous; and in *Fumaria*, Dipetalous and Tetrapetalous: and the Number is also sometimes variable in the same Species; as is observed in *Carica*, and *Jatropha*.

The Structure of the *Pericarpium* was formerly thought to be of great Consequence in determining the Genera; but there are Examples without Number that demonstrate the contrary. There are a great many Genera that have been established on Distinctions in the *Pericarpium*, and that are now rejected; of these we shall give an ample List in Chap. 33.

The Characters of *luxuriant* Flowers, whether *Eunuchs* * or *Mutilate*, cannot be

* *Eunuchs* are such as have lost the *Stamina*, which is the Case of full Flowers. *Mutilate* are those that are incomplete, wanting the *Corolla* or *Perianthium*.

allowed any Place in determining the Genera ; for in full Flowers no Number of Petals can be assigned, and the Stamina are generally wanting, the Number of which makes a Part of the generic Character ; and in mutilate Flowers, as in some Species of *Campanula*, *Ipomoea*, and *Ruellia*, the Corolla would be excluded from the Description, contrary to the Nature of the other Species of the Genus. But as the Calyx* in full Flowers is scarce ever altered, it may detect the Genus ; and the lowest Series of Petals in polypetalous Corollæ remaining the same in respect to Number, the Genus may also be often known by that Character ; as in *Papaver*, *Nigella*, and *Rosa*.

* Some Systematists have distributed the whole Body of Vegetables by the Differences of the Calyx ; and in such Systems the full Flowers, as our Author observes, are more easily referred to their proper Genus than in his own, the Calyx not being subject to Luxuriancy : Instances of this are in *Hepatica*, *Ranunculus*, and *Alcea*.

C H A P. XXXI.

*Of the GENERA, rejected by the sexual System,
as not established on the Fructification.*

WE have observed, in Chap. 29. that the earlier Botanists had admitted many Genera, on Distinctions that were not grounded on the Parts of Fructification, but on the Habit of Plants, and on other Circumstances which are now considered as specific Distinctions only: Of these we shall here give an ample List. The Reader will here take Notice, that under the first Column are ranged the Genera that are abolished; and over-against them, in the Second, the Genus to which they are severally to be referred*, with the specific Difference that had given Occasion to the false Distinction.

* The Names and the generic Arrangement of Vegetables having undergone many Alterations during the Progress of the Improvements made in the Science, the new Genera, to which these false ones are referred in this and the following Lists, do not all stand under the Titles given to them in the later Editions of the Works of *Linnaeus*. Where this happens, we shall explain it by a Note, chusing that Method rather than to alter the Lists themselves, which we have taken from the *Philosophia Botanica*.

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OLD GENERA.

NEW GENERA.

<i>Limodorum</i>	<i>Orchis</i> , with a fibrose Root.
<i>Bistorta</i>	<i>Polygonum</i> , with a fleshy Root.
<i>Rapa</i>	<i>Brassica</i> , with a gibbose Root.
<i>Sisarum</i>	<i>Sium</i> , with a tuberosc Root.
<i>Hermodactylus</i>	<i>Iris</i> , with a tuberosc Root.
<i>Sisyrinchium</i>	{ <i>Iris</i> , with a double Bulb, one over the other.
<i>Xiphium</i>	
<i>Lilio Fritillaria</i>	<i>Iris</i> , with a tunicated Bulb.
<i>Mesomora</i>	<i>Fritillaria</i> , with a squamose Bulb.
<i>Anacampteros</i>	<i>Cornus</i> , with an herbaceous Stem.
<i>Psyllium</i>	<i>Sedum</i> , with an erect Stem.
<i>Bellis Leucanthemum</i>	<i>Plantago</i> , with a branching Stem.
<i>Pilosella</i>	{ <i>Bellis</i> , with a leafy Stem.
<i>Suber</i>	
<i>Larix</i>	<i>Hieracium</i> , with a naked Stem.
<i>Genistella</i>	<i>Quercus</i> , with a fungous Bark.
<i>Potamogethys</i>	<i>Abies*</i> , with fasciculate Leaves.
<i>Lupinaster</i>	<i>Genista</i> , with jointed Leaves.
<i>Dracunculus</i>	<i>Alnus†</i> , with Leaves not starry.
<i>Trichomanes</i>	<i>Trifolium</i> , with digitate Leaves
<i>Chymenum</i>	<i>Arum</i> , with pedate Leaves.
<i>Muscoides</i>	<i>Asplenium</i> , with pinnate Leaves.
<i>Lentiscus</i>	<i>Lathyrus</i> , with pinnate Leaves.
<i>Faba</i>	{ <i>Fungermannia</i> , with Leaves many times imbricate
<i>Cytisogenista</i>	
<i>Colocasia</i>	{ <i>Terebinthus ‡</i> , with no odd foliole to the Leaves.
<i>Cirsium</i>	
<i>Coronopus</i>	<i>Vicia</i> , with Leaves that have no Cirrus.
<i>Coronopus</i>	<i>Spartium</i> , with Leaves simple and triple.
<i>Ilex</i>	<i>Arum</i> , with Leaves not Ear-shaped.
	<i>Carduus</i> , with Leaves without Thorns
	<i>Cochlearia</i> , with a pinnatifid Leaf.
	<i>Plantago</i> , with dentate Leaves.
	<i>Quercus</i> , with denticulate Leaves.

* Now *Pinus*

† Now *Elatine*

‡ Now *Pistacia*

OLD GENERA.

NEW GENERA.

<i>Scorzoneroides</i>	<i>Scorzonera</i> , with dentate Leaves
<i>Anguria</i>	<i>Cucurbita</i> , with multifid Leaves
<i>Alcea</i> *	<i>Malva</i> , with multifid Leaves.
<i>Millefolium</i>	<i>Ptarmica</i> , with Leaves minutely divided.
<i>Cicutaria</i>	<i>Ligusticum</i> , with a Cicutia Leaf.
<i>Cedrus</i>	<i>Juniperus</i> , with a Cypress Leaf.
<i>Ranunculoides</i>	<i>Ranunculus</i> , with capillary Leaves.
<i>Albagi</i>	<i>Hedysarum</i> , with simple Leaves.
<i>Nissolia</i>	<i>Lathyrus</i> , with simple Leaves
<i>Marfilea</i>	<i>Jungermannia</i> , with simple Leaves.
<i>Balsamita</i>	<i>Tanacetum</i> , with undivided Leaves.
<i>Cepa</i>	<i>Allium</i> , with fistulous Leaves.
<i>Aphaca</i>	{ <i>Lathyrus</i> , with no Leaves but Stipulæ only
<i>Mimosa</i>	<i>Acacia</i> †, with sensitive Leaves.
<i>Oxyoides</i>	<i>Oxalis</i> , with sensitive winged Leaves.
<i>Aurantium</i>	<i>Citrus</i> , with cordate Petioles ‡.
<i>Calamintha</i>	<i>Melissa</i> , with branching Peduncles .
<i>Cotinus</i>	<i>Rhus</i> , with woolly Peduncles
<i>Virga Sanguinea</i>	<i>Cornus</i> , with a naked Cyme.
<i>Corona Imperialis</i>	{ <i>Fritillaria</i> , with a Head of Leaves on the Racemus.
<i>Stæchas</i>	<i>Lavandula</i> , with Bractææ on the Spike.
<i>Carex</i>	<i>Cyperoides</i> §, with androgynous Spikes.
<i>Chamæpithys</i>	<i>Teucrium</i> , with sparsed Leaves.
<i>Acinos</i>	<i>Thymus</i> , with sparsed Leaves.
<i>Limonium</i>	<i>Statice</i> , with sparsed Leaves.

* *Alcea*, is still the Title of a Genus, though of a different one, being applied to the *Malva Rosea*, or *Hollyhock*.

† *Mimosa* is now the Title of the whole Genus, including the *Acacias*.

‡ Footstalks of the Leaves.

|| Footstalks of the Flowers.

§ *Carex* is now the Title of the Genus,

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OLD GENERA.

NEW GENERA.

<i>Chamaedrys</i>	<i>Teucrium</i> , with verticillate Leaves.
<i>Thymbra</i>	<i>Satureia</i> , with sparsed Leaves.
<i>Volubilis</i>	<i>Ipomoeia</i> , with Flowers in Heads.
<i>Polium</i>	<i>Teucrium</i> , with cymose Flowers
<i>Castanea</i>	<i>Fagus</i> , with Flowers in Spikes
<i>Fagopyrum</i>	{ <i>Polygonum</i> , with spiked Flowers, and a fibrose Root.
<i>Majorana</i>	{ <i>Origanum</i> , with rounder Spikes of Flowers.
<i>Malus</i>	<i>Pyrus</i> , with a distinct Face.
<i>Cydonia</i>	<i>Pyrus</i> , with a distinct Face.
<i>Armeniaca</i>	<i>Prunus</i> , with a distinct Face.
<i>Cerasus</i>	<i>Prunus</i> , with a distinct Face.
<i>Lauro-Cerasus</i>	<i>Prunus</i> , with a distinct Face.
<i>Limon</i>	<i>Citrus</i> , with a distinct Face.
<i>Napus</i>	<i>Brassica</i> , with a distinct Face.
<i>Absinthium</i>	<i>Artemisia</i> , with the outward Face distinct.
<i>Abrotanum</i>	<i>Artemisia</i> , with the outward Face distinct.
<i>Bellidiastrum</i>	<i>Doronicum</i> , with a distinct Habit.
<i>Euphorbia</i>	{ <i>Tithymalus</i> *, with the Habit not branch- ing.
<i>Usnea</i>	<i>Lichen</i> , with the Habit capillary.
<i>Coralloides</i>	<i>Lichen</i> , with the Habit caulescent.
<i>Clavaria</i>	{ <i>Coralloides</i> †, with the Habit not branch- ing.
<i>Tuber</i>	<i>Lycoperdon</i> , with a more solid Substance.
<i>Fungoides</i>	{ <i>Elvela</i> , with a Substance smooth on both Sides.
<i>Lycoperdoides</i>	<i>Lycoperdon</i> , with a cellular Substance.
<i>Amanita</i>	<i>Agaricus</i> , with the Pileus on a Stipes.
<i>Phallus</i>	{ <i>Boletus</i> , with a Volva at the Base of the Stipes.
<i>Phalloboletus</i>	{ <i>Boletus</i> , with a Pileus not closed in the Sides.
<i>Polyporus</i>	{ <i>Boletus</i> , with Pores not to be distin- guished.

* *Euphorbia* is now the Title of the Genus.

• Now *Clavaria*.

OLD

OLD GENERA.

NEW GENERA.

<i>Erinaceus</i>	<i>Ulex</i> , thick-set with Spines.
<i>Thysselinum</i>	<i>Selinum</i> , with a milky Juice.
<i>Moly</i>	<i>Allium</i> , with a sweet Scent.
<i>Acetosa</i>	<i>Lapathum</i> *, with an acid Taste.
<i>Colocynthis</i>	<i>Anguria</i> †, with a bitter Fruit.

* Now *Rumex*.

† Now *Cucumis*.

C H A P. XXXII.

Of the GENERA rejected by the System, as grounded on the Variations of some Parts only of the Fructification.

IT has been observed, in Chap. 29, that there are few Genera, wherein all the Parts of Fructification are constant in every Species; and that this Inconstancy of particular Parts had been another Source of Error in former Botanists: We shall here give a List of these Mistakes, referring the old Genera to the new Titles, in the same Manner as we did those in the List given in the preceding Chapter.

OLD GENERA:

NEW GENERA.

<i>Arisarum</i>	<i>Arum</i> , with a hooded Spatha.
<i>Asteriscus</i>	<i>Bupthalmum</i> , with a starry leafy Calyx.
<i>Silybum</i>	<i>Carduus</i> , with a thorny Calyx.
	M 4
	<i>Moldavica</i>

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OLD GENERA.

NEW GENERA.

<i>Moldavica</i>	{ <i>Dracocephalum</i> , with the Calyx gibbous and bilabiate
<i>Tithymaloides</i>	{ <i>Euphorbia</i> , with the Calyx gibbous and irregular.
<i>Trionum</i>	<i>Hibiscus</i> , with an inflate Calyx.
<i>Ficaria</i>	{ <i>Ranunculus</i> , with a triphyllous Calyx and polypetalous.
<i>Iva</i>	<i>Teucrium</i> , with a gibbous Calyx
<i>Lunularia</i>	{ <i>Marchantia</i> , with the common Calyx quadrifid.
<i>Leucanthemum</i>	{ <i>Chrysanthemum</i> , with the Squamæ of the Calyx narrow
<i>Cardiaca</i>	<i>Leonurus</i> *, with a quinquedentate Calyx.
<i>Paronychia</i>	{ <i>Herniaria</i> , with the Leaves of the Calyx hooded
<i>Pseudo-Diellam-nus</i>	{ <i>Marrubium</i> , with a Funnel-shaped Calyx
<i>Anemone-Ranunculus</i>	{ <i>Anemonoides</i> †, with a pentapetalous Corolla
<i>Linaria</i>	<i>Antirrhinum</i> , with a tailed Corolla.
<i>Valerianoides</i>	<i>Valeriana</i> , with a tailed Corolla.
<i>Bromelia</i>	<i>Ananas</i> ‡, with a tripetalous Corolla.
<i>Opuntia</i>	<i>Melocactus</i> with a polypetalous Corolla.
<i>Glaucium</i>	<i>Chelidonium</i> , with a rosaceous Corolla.
<i>Polygonatum</i>	{ <i>Lil. Convallium</i> §, with a tubulose Corolla.

* The scarlet *Leonurus* of the Cape is removed to the Genus *Phlomis*, on account of its wanting the shining Points on the Antheræ; but the Title *Leonurus* is nevertheless applied to the *Cardiaca*.

† Now *Anemone*.

‡ *Bromelia* is now the Title of the Genus.

|| Now *Cactus*.

§ Now *Convallaria*.

Centaureum

OLD GENERA.

NEW GENERA.

<i>Centaureum minus</i>	<i>Gentiana</i> , with a funnel-shaped Corolla.
<i>Lilium</i>	{ <i>Hemerocallis</i> , with a hexapetalous Corolla
<i>Borbonia</i>	
<i>Benjoe</i>	<i>Laurus</i> , with a pentaphylloideous Calyx.
	<i>Laurus</i> , with an octofid Corolla.
<i>Auricula Urfi</i>	{ <i>Primula</i> , with an hypocrateriform Corolla
<i>Triphylloides</i>	
<i>Oxycoccus</i>	<i>Trifolium</i> , with a monapetalous Corolla.
<i>Bonarota</i>	<i>Vaccinium</i> , with a tetrapetalous Corolla.
<i>Zannonia</i>	<i>Veronica</i> , with a tubulose Corolla.
	<i>Commelina</i> , with a tripetalous Corolla.
<i>Borraginoides</i>	{ <i>Borrago</i> , with an infundibuliform Corolla.
<i>Horminum</i>	
	<i>Salvia</i> , with a galeate Galea, and a concave Beard.
<i>Sclarea</i>	{ <i>Salvia</i> , with a falcate Galea, and a concave Beard.
<i>Phelypæa</i>	{ <i>Clandestina</i> *, with the Galea of the Corolla bifid.
<i>Murucuja</i>	
<i>Sherardia</i> †	<i>Passiflora</i> , with an undivided Nectarium.
	<i>Verbena</i> , with two Stamina.
<i>Stellaris</i>	{ <i>Ornithogalum</i> , with Stamina that are not flat.
<i>Porrus</i>	
<i>Dodonæa</i>	<i>Allium</i> , with trifid Stamina.
<i>Hypocistis</i>	<i>Ilex</i> , with a trifid Flower.
<i>Radiola</i>	<i>Asarum</i> , with a quadrifid Flower.
<i>Unifolium</i>	<i>Linum</i> , with a quadrifid Flower.
<i>Bernhardia</i>	<i>Convallaria</i> , with a quadrifid Flower.
<i>Petasites</i>	<i>Croton</i> , with dioecious Flowers.
<i>Ananthocyclus</i>	<i>Tussilago</i> , with fasciculate Flowers.
<i>Ceratocephalus</i>	<i>Cotula</i> , with flosculose Flowers.
<i>Doria</i>	<i>Bidens</i> , with radiate Flowers.
<i>Medium</i>	<i>Solidago</i> , with few Florets in the Radius.
	<i>Campanula</i> , with Fruit quinquelocular.

* Now *Lathræa*.

† The Title *Sherardia* is still in Use, but is applied to another Genus.

Speculum

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OLD GENERA.

NEW GENERA.

<i>Speculum Veneris</i>	<i>Campanula</i> , with filiquose Fruit.
<i>Cornucopioides</i>	<i>Valeriana</i> , with an irregular Flower.
<i>Limonoides</i>	<i>Statice</i> , with a monapetalous Flower.
<i>Viscaria</i>	<i>Silene</i> , with a quinquelocular Fruit.
<i>Tetragonolobus</i>	<i>Lotus</i> , with an angular Fruit.

C H A P. XXXIII.

Of the GENERA, rejected by the System, as grounded on a Difference in the Fruit only.

IT has been observed, in Chap. 30, that a great many Genera had been established on Account of Differences in the Pericarpium, but that they have since been abolished : Of these the following is a List ; in which, as in the preceding Lists, it will appear where they are now ranged.

OLD GENERA.

NEW GENERA.

<i>Clandestina</i>	<i>Anblatum</i> *, with an elastic Fruit.
<i>Trollius</i> †	<i>Helleborus</i> , with a multicapsular Fruit.
<i>Sesamoides</i>	<i>Reseda</i> , with a multicapsular Fruit.
<i>Lycopersicon</i>	<i>Solanum</i> , with a multicapsular Fruit.
<i>Ascyrum</i> ‡	<i>Hypericum</i> , with a quinquecapsular Fruit.

* Now *Lathræa*.

† *Trollius* and *Helleborus* are parted again.

‡ The Title *Ascyrum* is still in Use for another Genus.

Dortmanna

OLD GENERA.

NEW GENERA.

<i>Dortmanna</i>	<i>Rapuntium</i> *, with a bilocular Fruit.
<i>Helianthemum</i>	<i>Cistus</i> , with an unilocular Fruit.
<i>Androsæmum</i>	<i>Hypericum</i> , with an unilocular Fruit.
<i>Pavia</i>	<i>Esculus</i> , with an unilocular Fruit.
<i>Asarina</i>	<i>Antirrhinum</i> , with multivalvular Fruit.
<i>Elatine</i>	<i>Antirrhinum</i> , with the Fruit bursting on the Side
<i>Nelumbo</i>	<i>Nymphaea</i> , with the Fruit perforate at the Top.
<i>Raphanistrum</i>	<i>Raphanus</i> , with articulate Fruit.
<i>Cakile</i>	<i>Bunias</i> , with articulate Fruit.
<i>Ulmaria</i>	<i>Filipendula</i> †, with twisted Fruit.
<i>Persica</i>	<i>Amygdalus</i> , with a succulent Fruit.
<i>Cassia</i>	<i>Senna</i> ‡, with a succulent Fruit.
<i>Inga</i>	<i>Acacia</i> , with a succulent Fruit.
<i>Malvaviscus</i>	<i>Hibiscus</i> , with a succulent Fruit.
<i>Lobelia</i>	<i>Rapuntium</i> §, with a dupraceous Fruit.
<i>Perefskia</i>	<i>Cactus</i> , with a leafy Fruit.
<i>Sabina</i>	<i>Juniperus</i> , with a warted Fruit.
<i>Bihai</i>	<i>Musa</i> , with a trispermous Fruit.
<i>Alaternus</i>	<i>Rhamnus</i> , with a trispermous Fruit.
<i>Frangula</i>	<i>Rhamnus</i> , with a dispermous Fruit.
<i>Dracunculus</i>	<i>Hæmanthus</i> , with monospermous Fruit.
<i>Onobrychis</i>	<i>Hedysarum</i> , with monospermous Fruit.

* Now *Lobelia*.

† Now *Spiræa*.

‡ *Cassia* is now the Title of the Genus, which includes the *Cassia Fistula*, and many other Species; but the *Cassia Lignæa* of Sumatra, whose Bark so nearly resembles that of the *Cinnamomum*, is a *Laurus*, as is the *Cinnamomum* also; and the two Plants are by some supposed to be the same.

|| Now *Mimosa*.

§ *Lobelia* is now the Title of the Genus.

Malvinda

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OLD GENERA.

NEW GENERA.

<i>Malvinda</i>	<i>Abutilon</i> *, with a Fruit not inflate.
<i>Cysticapnos</i>	<i>Fumaria</i> , with an inflate Fruit.
<i>Impatiens</i>	<i>Balsamina</i> †, with an attenuate Fruit.
<i>Guazuma</i>	<i>Cacao</i> ‡, with a reticulate Fruit.
<i>Paliurus</i>	<i>Rhamnus</i> , with a shield-shaped Fruit.
<i>Alisma</i>	{ <i>Damaſonium</i> with a Fruit not cornicu- late
<i>Securidaca</i> §	<i>Coronilla</i> , with Faulchion-shaped Fruit.
<i>Melo</i>	<i>Cucumis</i> , with an ovate Fruit.
<i>Melopepo</i>	<i>Cucurbita</i> , with a sulcate Fruit.
<i>Rapistrum</i>	<i>Crambe</i> , with a Fruit that does not open.
<i>Radicula</i>	<i>Sisymbrium</i> , with a filiculose Fruit.
<i>Blattaria</i>	<i>Verbascum</i> , with a rounder Fruit.
<i>Persea</i>	{ <i>Laurus</i> , with a Fruit that is berried on every Side.
<i>Cururi</i>	{ <i>Seriana</i> ††. with a Fruit that bears Seeds at the Top.
<i>Bursa Paſtoris</i>	{ <i>Thlaſpi</i> , with a Fruit that has no Mar- gin.
<i>Nasturtium</i>	<i>Lepidium</i> , with a Margin to the Fruit.
<i>Valerianella</i>	<i>Valeriana</i> , with a Fruit not pappose,
<i>Anemonoides</i>	<i>Anemone</i> , with naked Seeds.
<i>Eupatoriophala- crum</i>	{ <i>Verbeſina</i> , with naked Seeds.
<i>Leontodontoides</i>	<i>Hyoseris</i> , with Seeds almoſt naked.
<i>Attractylis</i> ††	{ <i>Carthamus</i> , with an obſolute Crown to the Seeds.

* Now *Sida*.

† *Impatiens* is now the Title of the Genus.

‡ Now *Theobroma*.

|| *Alisma* is now the Title of the Genus.

§ *Securidaca* is ſtill a Title, but of a different Genus.

†† Now *Paullinia*.

†† *Attractylis* is ſtill a Title, but applied to another Genus.

Carthamoides

OLD GENERA.

NEW GENERA.

<i>Carthamoides</i>	<i>Carthamus</i> , with pappose Seeds.
<i>Zazintha</i>	<i>Lapsana</i> , with pappose Seeds.
<i>Alypum</i>	<i>Globularia</i> , with pappose Seeds.
<i>Xeranthemoides</i>	<i>Xeranthemum</i> , with a feathered Pappus.
<i>Asterocrypterus</i>	<i>Aster</i> , with a feathered Pappus.
<i>Acarua</i>	<i>Cnicus</i> , with a feathered Pappus.
<i>Achyrophorus</i>	<i>Hypochaeris</i> , with a feathered Pappus.
<i>Carlinoidea</i>	<i>Carlina</i> , with an obsolete Pappus.
<i>Viticella</i>	<i>Clematis</i> , with tailed Seeds.
<i>Nymphoides</i>	§ <i>Menyanthes</i> , with an Arillus to the Seed.
<i>Karatas</i>	<i>Bromelia</i> , with no Arillus to the Seed.
<i>Tragopogonoides</i>	<i>Tragopogon</i> , with bent Seeds.
<i>Tinus</i>	<i>Viburnum</i> , with Pear-shaped Seeds.
<i>Opulus</i>	<i>Viburnum</i> , with Heart-shaped Seeds.
<i>Perficaria</i>	<i>Polygonum</i> , with triangular Seeds.
<i>Emerus</i>	<i>Coronilla</i> , with cylindrical Seeds.
<i>Foeniculum</i>	<i>Anethum</i> , with thick Seeds.
<i>Lens</i>	<i>Cicer</i> , with Lens-shaped Seeds.
<i>Pepo</i>	<i>Cucurbita</i> , with Seeds not emarginate.
<i>Falcaria</i>	<i>Sium</i> , with slender Seeds.
<i>Cerinthoides</i>	<i>Cerithe</i> , with four distinct Seeds.
<i>Blæria</i>	<i>Sherardia</i> , with echinate Seeds.

AN
INTRODUCTION
TO
BOTANY.

PART THE THIRD.

CHAP. I.

Of VEGETABLES, and their Parts.

VEGETABLES are divisible into the seven Families or Tribes following *, viz.

* This natural Division of Vegetables into several Tribes being given in the *Philosophia Botanica*, we were unwilling to omit it; but it is necessary to give the Reader a Caution, lest he confound it with the artificial or systematic Distribution of Plants explained in the second Part of this Work; the Division here given is drawn from a Consideration of the whole Vegetable; whereas the systematic or artificial Distribution into twenty-four Classes is grounded on the Fructification only.

1. FUNGI,

f

1. *FUNGI*, *Mushrooms*.
2. *ALGÆ*, *Flags*; whose Root, Leaf, and Stem are all one.
3. *MUSCI*, *Mosses*; whose Antheræ have no Filaments, and are placed at a Distance from the female Flower, and whose Seeds also want their proper Tunic and Cotyledons.
4. *FILICES*, *Ferns*; whose Fructification is on the Back of the *Fronde* *.
5. *GRAMINA*, *Grasses* †; which have simple Leaves, a jointed Culm or Stem, a glumose Calyx, and a single Seed.
6. *PALMÆ*, *Palms*; which have simple Stems that are *Frondose* ‡ at the Summit, and have their Fructifications on a Spadix issuing from a Spatha.
7. *PLANTS*, which include all that do not enter into any of the other Divisions. These are,

Herbaceous, when they die down to the Root every Year; for in the perennial Kinds, the Buds are all produced on the Root below the Surface of the Ground.

* *Leaves* of the Ferns and Palms so called; see the Explanation of the Term *Frons*, in Chap. 4.

† This Tribe includes the various Sorts of Corn as well as the Grasses.

‡ See the Term *Frons*, explained in Chap. 4.

Shrubs,

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Shrubs, when their Stems come up *without* Buds *.

Trees, when their Stems come up *with* Buds.

Vegetables are each primarily divisible into, 1. The *Root*. 2. The *Herb* or Plant itself. 3. The *Fructification*. Of these the last has been already treated of in the first Book: The two others, upon which the specific Differences of Vegetables more immediately depend, come now under Consideration, and will be the Subject Matter of the ensuing Chapters †.

* Nature has put no Limits between a Tree and a Shrub, which is only a Vulgar Distinction. This *Linnaeus* acknowledges; and argues, that his own Distinction though he thinks it the best, is nevertheless exceptionable; inasmuch as there are seldom any Buds upon the large Trees in *India*; all which must therefore by this Definition, notwithstanding their great Height, be ranked with Shrubs.

† It may not be improper here to obviate an Objection that may be made to the Method pursued in this Work. It may be asked, if the Matter of this third Part would not have stood more properly in the first. In answer to this it is admitted, that the Order of Nature would thereby have been more directly followed: But the Design of this Work was not so much to follow the Order of Nature, as to explain the System of *Linnaeus*; and as the Classes, Orders and Genera which come first in the System are grounded on the Fructification, the Beginning with that Part of the Vegetable was indispensably necessary.

C H A P.

CHAP. II.

Of ROOTS.

THE ROOT (whose Office is to draw up Nourishment, and which also produces the Herb with its Fructification) consists of two Parts, viz. *Caudex*, the *Stock* or Body of the Root; and *Radicula*, the *Radicule* or little Root.

CAUDEX, the *Body* of the Root both ascends and descends.

The ascending *Caudex* raises itself gradually above Ground, serving often as a Trunk, and produces the Herb or Plant*.

The descending *Caudex* strikes gradually downward into the Ground, and puts forth Radicles. It has been distinguished, according to its various Structure, into

Perpendicular, when it runs directly downwards.

Horizontal, when it extends itself transversely under the Earth.

* *Linnaeus* infers from hence, that all Trees and Shrubs are to be considered as Roots above Ground; and that this is the Reason that Trees, when inverted, put forth Leaves from the descending Stem, and Roots from the ascending.

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Simple, when it has no Subdivisions.

Ramose, branching; when it is divided into lateral Branches.

Fusiform, Spindle-shaped; when it is oblong, thick and tapering, as in *Daucus* and *Pastinaca*.

Tuberosæ, knobbed; when it consists of roundish Bodies collected into a Fascicle or Bunch; as in *Pæonia*, *Hemerocallis*, *Helianthus*, *Solanum* and *Filipendula*.

Repent, creeping; when it runs out to a Distance, and puts forth Radicles from Space to Space.

Fibrosæ, when it consists only of fibrosæ Radicles.

Præmorsæ, bitten off; when the lower Part is truncate, and the Termination not tapering; as in *Scabiosa*, *Plantago*, and *Valeriana*.

RADICULA, the *Radicle*, is the fibrosæ Part of the Root, which terminates the descending Caudex, and enables the Root to draw Nourishment for the Support of the Vegetable.

C H A P,

C H A P. III.

Of the H E R B.

THE HERB is a Part of the Vegetable arising from the Root, and terminated by the Fructification. It comprehends,

1. The *TRUNK*, which serves to multiply the Herb, and leads immediately from the Root to the Fructification. It is clothed with the Leaves, and terminated by the Fructification. See Chap. 4.

2. The *LEAVES*, whose Office is to transpire and attract, like the Lungs in Animals, and to afford Shade. See Chap. 5, 6, 7.

3. The *FULCRA*, *Props*; which serve as Stays to strengthen the Plant; but may however be taken off without destroying it. See Chap. 8.

4. The *HYBERNACULA*, *Winterings**; each of which is a Compendium of the Herb upon its Root before it begins to grow. See Chap. 9.

* These are the Bulbs and Buds.

C H A P. IV.

Of the TRUNK.

TRUNCUS, the *Trunk*, is that which produces the Leaves and Fructification: It is of seven Kinds, viz. *Caulis*, *Culmus*, *Scapus*, *Pedunculus*, *Petiolus*, *Frons*, and *Stipes*.

1. *CAULIS*, a *Stem*, is the proper Trunk of the Herb, and serves to elevate the Leaves and Fructification: it is either *Simple* or *Compound*.

SIMPLE Stems are such as proceed in a continued Series towards their Summits: And these may be, *integri*, *entire*; or *ramose*, *branchy*.

Integri, *entire*; when they are most simple, having scarce any Branches. These may be, *Nudi*, *naked*; when they are destitute of Leaves; as in *Euphorbia*, *Cactus*, *Stapelia*, *Ephedra*, and *Cuscuta*.

Foliate, *leafy*; when they are furnished with Leaves.

Flexuose, *bending* different Ways, when the Direction of the Stem changes at every joint; as in *Ptelea*.

Volubiles, *twining*; when they ascend spirally

rally by the Branch of some other Plant : These wind either to the left, according to the Motion of the Sun (as it is commonly phrased) as in *Humulus*, *Helxine*, *Lonicera*, and *Tamus* ; or to the right, contrary to the Sun's Motion ; as in *Convolvulus*, *Basella*, *Phaseolus*, *Cynanche*, *Euphorbia*, and *Eupatorium*.

Reclinate, reclined ; when they bend in an Arch towards the Earth.

Procumbent, lying upon the Ground ; when their Direction is horizontal.

Repent, creeping ; when by lying upon the Ground they put forth Roots at certain Intervals ; as in *Hedera* and *Bignonia*.

*Sarmentose** ; when they are Repent and Subnude †.

Parasitic ‡ ; when they grow not out of the Ground, but on some other Plant.

Teretes, round ; when they are Cylindric.

Ancipites, double-edged ; when they have two opposite Angles ; and also *Digonous*, *Trigonous*, *Tetragonous*, *Pentagonous*, *Polygonous*, having *two, three, four, five, or many* Angles, which are all Species of Ancipites ; also,

* From *Sarmentum*, a long shoot, such as those of a Vine.

† Almost naked or bare of Leaves.

‡ Supporting themselves on others like Parasites.

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Triquetrous, Three-square; when they have three plane Sides; and,

Triangular, Quadrangular, Quinquangular, Multangular; when they have *three, four, five, or many* Sides or Angles.

Sulcate, furrow'd; when they are cut in with broad and deep Grooves or Channels.

Striate, streaked; when they are marked with very thin hollow Lines.

Glabri, smooth; when they have a smooth Surface.

Villose, hairy or shaggy; when there is a Down of soft Hairs upon them.

Scabrous, rough; when they are covered with little projecting Points.

Hispid *; when they are covered with stiff Bristles.

Ramose, branchy; when they are furnished with lateral Branches; And these are,

Ascending; when the Branches incline upwards.

Diffuse; when the Branches are spreading.

Distich, in two Rows; when the Branches are produced in a horizontal Situation.

Brachiate, having Arms; when the

* The Word expresses a greater Degree of Roughness.

Branches are opposite, and each Pair is crossed by the Pair next above or below it.

Ramosissimi, very branchy; when the Branches are many, and without Order.

Fulcrate, propt; when the Branches descend to the Root; as in *Ficus*.

Proliferous; when they send forth Branches only from the Center of the Apex; as in *Pinus*.

The rest as in *entire* Stems.

COMPOUND Stems, are such as are subdivided into Ramuli, small Branches, and diminish as they ascend. These are either,

Dichotomous, forked; when the Division is always in two Parts.

Subdivided; when they are divided into Branches irregularly or without Order; or,

Articulate, jointed; when they are distinguished from Space to Space by Knots or Joints; as in *Piper*.

2. *CULMUS*, a *Straw*, is the proper Stem or Trunk of a Grass, and serves to elevate and support both the Leaves and the Fructification: It admits of most of the Distinctions already given for a *Caulis* or Stem; besides which it may be either,

Enodis, without Knots; when it is continuous, and not intercepted by Joints.

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Articulate, jointed; when it is connected by various Joints.

Squamose, scaly; when it is covered with imbricate Scales.

3. *SCAPUS*, a *Stalk*, is an *universal* Trunk, raising the Fructification but not the Leaves; as in *Narcissus*, *Pyrola*, *Convallaria*, and *Hyacinthus*.

4. A *PEDUNCLE*, or *Footstalk* of a *Flower*, is a *partial* Trunk, raising the Fructification but not the Leaves.

Pedicellus, is a *partial Peduncle*.

The Determination of Peduncles respects *Place* and *Manner*.

Determination in respect to *Place*, shews where the Base of the Peduncle is inserted into the Plant: And in this respect Peduncles are,

Radical, belonging to the *Root*; when they come out immediately from the Root.

Cauline, belonging to the *Stem*; when they are placed on the Stem.

Rameous, belonging to the *Branches*; when they come out upon the Branches.

Axillary *, coming out from the *Wings*; that is, either between the Leaf and the Stem, or between the Branch and the Stem.

* From *Axilla*, an Arm pit.

Terminal, when they *terminate* the Branches or Stem.

Solitary, when there comes out but *one* from the same Place.

Sparsed, scattered; when they are numerous, and come out without Order.

Determination in respect to *Manner*, shews how the Flowers are born and connected on the Summits of the Peduncles: And in this Respect Peduncles have the following Variations.

Uniflorous, Biflorous, Triflorous, or Multiflorous Peduncles, are such as bear *one, two, three, or many* Flowers, according to the Number of the Fructifications on a single Peduncle.

Fasciculus, a Bunch, is a Collection of Flowers that are erect, parallel, forming a flat or even Surface, and close to one another; as in *Dianthus barbatus* †.

Capitulum, a little Head, is composed of a Number of Flowers collected almost into a globular Form; as in *Gomphrena*.

Spica, a Spike, has sessile Flowers that are alternate and dispersed about a common Peduncle that is simple. It is called *Spica secunda*, a *single-rowed Spike*, when the Flowers

† Sweet William.

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are all turned *one* Way : And *Spica disticha*, a *double-rowed Spike*, when the Flowers stand *two* Ways.

— A *Corymbus* *, is a kind of Spike, the Flowers of which have each its proper *Pedicellus* †, or *Partial Footstalk*, raised to a proportionable Height ; as in *Spiræa opulifolia*, and *Ledum*.

A *Panicle*, is a Fructification dispersed on Peduncles variously subdivided. It is a *Diffuse* Panicle, when the Pedicelli are *divaricate*, *spreading asunder* ; and a *Coarctate* or *confined* one, when they stand close to each other.

A *Tbyrsus*, is a Panicle contracted into an ovate Form ; as in *Syringa*, and *Petasites*.

A *Racemus* ‡ consists of a Peduncle that has short lateral Branches ; as in *Vitis* and *Ribes*.

Verticillus, a *Whorl*, expresses a Number

* *Corymbus*, in its ancient and proper Signification, meant a Bunch of Ivy Berries : But it is now used as a botanical Term, for all Fructifications that are produced in the same Manner.

† In the *Philosophia Botanica*, it is not *Pedicellus*, but *Petiolus* ; which seems to be a Mistake, this Term being applied to Leaves only.

‡ *Racemus*, anciently signified a Bunch of Grapes.

of

of Flowers that are subseffile †, and are produced in Rings round the Stems.

5. A *PETIOLE*, or *Footstalk of a Leaf*, is a Species of Trunk that fastens the Leaves, but not the Fructification ; which Circumstance distinguishes it from a Peduncle, which is the Footstalk of a Flower, as has been explained above. There are some Cases where the Fructification and Leaves are born on the same Footstalks : as in *Turnera* and *Hibiscus* ; but these Instances are very rare.

FRONS ‡, is a Species of Trunk composed of a Branch and Leaf blended together ; and is frequently united with the Fructification ; it belongs properly to the *Palms* and *Filices*.

7. *STIPES* *, is used to express the Base or Trunk of a *Frons*, and is applied only to the *Palms*, *Filices*, and *Fungi*.

† With no Footstalks, or with very short ones.

‡ There is no Expression answerable to this Term in our Language. See the Note at Page 67.

* The Word in its proper Signification means a Trunk or Stock of any Plant. But the Sense in which the Term is received in Botany is as here explained : It is used only to express the Thread or fine Trunk that supports the Pappus in downy Seeds. See Part i. Chap. 7.

C H A P. V.

Of SIMPLE Leaves.

LEAVES are to be considered in three Respects, viz. 1. as *Simple*. 2. *Compound*. 3. *Determinate*. We shall in this Chapter treat only of the Simple.

SIMPLE Leaves are such as have only a single Leaf on a Petiole. They differ in respect to *Circumscription*, *Angles*, *Sinus*, *Apices*, *Margin*, *Superficies*, and *Substance*.

CIRCUMSCRIPTION considers the Form of the Circumference of Leaves where there are no Angles or Sinuations: In which respect Leaves are,

Orbiculate, round; when the longitudinal and transverse Diameters are equal, and the Circumference circular.

Subrotund, roundish; when the Figure is nearly orbiculate.

Ovate, Egg-shaped; when the longitudinal Diameter exceeds the transverse; and the Base is circumscribed with the Segment of a Circle, but the Apex is narrower.

Oval, or Eliptic; when the longitudinal Diameter exceeds the transverse, and the Circum-

Circumscription of both upper and lower Extremity is narrower than the Segment of a Circle.

Parabolic, in the Form of a *Parabola* *; when the longitudinal Diameter exceeds the transverse, and the Figure contracting from the Base upwards becomes *Semiovate*, *half Egg-shaped*.

Spatulate, resembling a *Spatula* †; when the Figure is roundish, but lengthened out by the Addition of a linear Base that is narrower.

Cuneiform, *Wedge-shaped*; when the longitudinal Diameter exceeds the transverse, and the Figure gradually contracts downwards.

Oblong, when the longitudinal Diameter is twice, thrice, &c. the Length of the transverse, and the Circumscription of each of the Extremities is narrower than the Segment of a Circle.

ANGLES are the prominent Parts of an horizontal Leaf. In respect to these, a Leaf is,

Lanceolate, *Spear-shaped*; when the Figure is oblong, narrowing gradually at each End towards the Extremity.

A geometric Curve so called.

† A Surgeon's Instrument so called.

Linear

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Linear; when it is every where of the same Breadth, though sometimes narrowing at the Extremities only.

Acerose, chaffy; when it is linear and persisting; as in *Pinus*, *Abies*, *Juniperus* and *Taxus*.

Subulate, Awl-shaped; when it is linear below, but gradually contracting towards the Top.

Triangular, three cornered; when the Disk is surrounded by three prominent Angles.

Quadrangular, Quinquangular, &c. four-cornered, five-cornered, &c. when four or five prominent Angles lie round the Disk.

Deltoid, shaped like a *Delta**; when the Figure is a Rhombus; that is, having four Angles, of which the two lateral ones are less distant from the Center than those at the Extremities.

Rotund, round; when it has no Angles.

SINUS, a *Hollow*, is a Term used to express those Openings or Cavities in Leaves which distinguish them into Parts: In respect to these, Leaves are said to be,

Reniform, kidney-shaped; when they are

* A Greek Letter so called. The Figure of the *Delta* is a Triangle, which does not exactly answer to the Character here given of a *Deltoid* Leaf.

roundish,

roundish, and hollowed at the Base, without any Angles.

Cordiform, Heart-shaped; when they are ovate, and hollowed at the Base, and the hinder or lower Part has no Angles.

Lunulate, Moon-shaped; when they are round, and hollowed at the Base, and the lower Part has no Angles.

Sagittate, Arrow-shaped; when they are triangular, hollowed at the Base, and are furnished with Angles at the lower Part.

Hastate, Javelin-shaped; when they are triangular, the Base and Sides hollowed, and the Angles spreading.

*Panduræform, Pandure-shaped**; when they are oblong, broader above than below, and contracted in the Sides.

Fissa, cloven; when they are divided by linear Sinusses, and have their Margins straight; and from the Number of such Divisions they are called *Bifid, Trifid, Quadrifid, Multifid*, &c. cut into *two, three, four, five*, or *many* Segments.

* A musical Instrument of the Lute kind, but now diffused: The Shape of it, as given by *Mersennus Harm. Instr. l. 1.* does not answer to that of the Leaves here explained; the Figure of which comes nearer to that of the Body of a Violoncello or Violin.

Lobate,

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Lobate, lobed; when they are divided to the Middle into Parts that stand wide from each other, and have their Margins convex; and from the Number of these they are called *Bilobe, Trilobe, Quadrilobe, or Quinquelobe*; consisting of *two, three, four, or five* Lobes.

Palmate, banded; when they are cut longitudinally into many Parts nearly equal; the Divisions extending themselves downward, almost to the Base where the Segments cohere.

Pinnatifid, cut into Wings; when they are divided transversely into Laciniae that are oblong and horizontal.

Lyrate, Lyre-shaped; when they are divided transversely into Laciniae, of which the upper ones are larger, and the lower ones farther asunder.

Laciniate, jagged; when they are variously divided into Parts, and those Parts in like Manner indeterminately subdivided.

Sinuate, hollowed; when they have broad and spreading Openings in the Sides.

Partite, divided; when they are separated down to the Base; and from the Number of the Divisions they are *Bipartite, Tripartite, Quadripartite, Quinquartite, or Multipartite,*

tipartite ; divided into *two, three, four, five,* or *many* Parts.

Integra, entire ; when they are without Divisions, and have no Sinus or Opening. This stands opposed to all the Kinds of divided Leaves before described.

APEX, Tip, is the Extremity in which the Leaf terminates. Leaves, in respect to their Apices, are called,

Truncate, lopped ; when they end in a transverse Line.

Præmorse, bitten in the Fore-part : when they are very obtuse, and are terminated by unequal Notches or Incisions.

Retuse, blunted ; when they terminate in an obtuse Sinus.

Emarginate, nicked ; when they terminate in a Notch.

Obtuse, blunt ; when they terminate as it were within a Segment of a Circle.

Acute, sharp ; when they terminate in an acute Angle.

Acuminate, pointed ; when they terminate in a subulate Apex.

Cirrbose, claspered ; when they terminate in a Clasper or Tendril, as in *Gloriosa*, *Flagellaria*, and *Nissolia*.

The *MARGIN* of a Leaf is the outermost Boundary of its Sides, exclusive of its
O
Disk.

Disk. Leaves, in respect to their Margin, are,

Spinose, Thorny or prickly; when the Margin of the Leaf runs into Points that are hard, stiff and pungent.

Inerm, unarmed or smooth; which is opposed to Spinose.

Dentate, toothed or indented; when the Margin ends in horizontal Points, that are of the Consistence of the Leaf, and are separated by intermediate Spaces.

Serrate, sawed; when the Margin is cut into sharp imbricate Angles, that point towards the Extremity of the Leaf: If they point towards the Base, the Leaf is said to be *retrorsum serrate, sawed backwards*.

Duplicato-serrate, doubly sawed; when there is a twofold Serrature, the less upon the greater.

Crenate, notched; when the Margin is cut into Angles, that point towards neither of the Extremities: And these are obtusely crenate, when the Angles are rounded: or acutely crenate, when the Angles are pointed.

Duplicato - crenate, doubly notched; when the Notches are two-fold, the less upon the greater.

Repand, bending back again; when the Margin

Margin is terminated with Angles, and interjacent Sinusses, that are both inscribed with the Segments of Circles *.

Cartilagineous, gristly; when the Edge of the Leaf is strengthened by a tough Border, the Substance of which differs from that of the Leaf.

Ciliate, lashed or fringed; when the Margin is surrounded on all Sides with parallel Bristles.

Lacera, rent or ragged; when they are variously cut on the Margin into unlike Segments.

Erofe, gnawed; when the Leaf is sinuate, and has other very small obtuse Sinusses or Hollows on its Margin.

Integerrima, very entire; when the outermost Margin is entire and quite free from Notches.

SUPERFICIES, Surface, is the Outside, or what covers the Disk of the Leaf, and respects both the supine † Disk or Face of the Leaf, and prone Disk or Back of it. Leaves, in respect to their Surface, are,

* A Serpentine Edge.

† Supine is what lies on its Back, or Face upwards; and prone, the contrary: These Terms are therefore well applied to the upper and under Disk or Face of a Leaf.

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Viscid, Clammy; when they are smeared over with a Juice that is not fluid but tenacious, sticky.

Tomentose, downy; when they are covered with a Nap of interwoven Hairs, scarce perceptible, that gives them a Whiteness.

Lanate, Woolly; when they are covered as it were with a Spider's Web; as in *Salvia* and *Sideritis*.

Pilose, hairy; when their Surface is covered with distinct Hairs that rise to some Length.

Hirsute, rough with Hair; when they are hairy in a greater Degree.

Villose, shaggy; when they are covered with a coarser Hair or Shag.

Hispid, rough; when the Disk is covered with a stiffish Sort of Bristles that are frangible.

Scabrous, rugged; when the Disk is covered with Tubercules, little Knobs.

Aculeate, prickly; when the Disk is beset with Points that are sharp and stiff.

Striate, Streaked; when the Surface is cut in, or scored longitudinally with parallel Lines.

Pappilose, nippy; when it is covered with Vesicles, little Bladders.

Punctate,

Punctate, dotted; when it is besprinkled with hollow Points or Dots.

Nitid, bright; when the Smoothness of the Leaves causes them to shine.

Plicate, plaited; when the Disk of the Leaf rises and falls in Angles towards the Margin; as in *Alchemilla*.

Undulate, waved; when the Disk of the Leaf rises and falls in Convexities towards the Margin.

Crisp, curled, when the Circumference of the Leaf becomes larger than the Disk admits of, and is hereby forced to undulate. All curled Leaves are Monsters.

Rugose, wrinkled; when the Veins of the Leaves contract into a narrower Compass than the Disk, so that the Substance between them is obliged to rise; as in *Salvia*.

Concave, hollow; when the Margin of the Leaf contracts, and becomes less than the Circumscription of the Disk, by which Means the Disk is depressed.

Venose, veiny; when the Vessels are branched all over the Leaves, and their Anastomose* or Joinings are plain to the naked Eye.

* A Term in Anatomy, expressing the Mouths or Orifices of Veins and Arteries; or in other Words, the Part where they unite, and the Blood is discharged from the one into the other.

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Nervose; when they have simple unbranched Vessels, that extend themselves from the Base to the Apex.

Colored; when they change their Green for some other Color; as in *Amaranthus tricolor* †.

Glabra, smooth; when the Surface is void of all Inequality.

The *SUBSTANCE* of a Leaf respects the Conditions of its Sides: In this respect Leaves are,

Teretes ‡, *round* like a Pillar; when they are for the most Part cylindric.

Semicylindric, like a *halved Cylinder*; when they are round on one Side, and flat on the other.

Tubulose, like a *Tube* or *Pipe*; when upon cutting them they appear to be hollow within.

Carnose, fleshy or *succulent*; when they are filled with a Pulp.

Compressed, flatted; when they are so com-

† Three-coloured.

‡ Round one Way and long the other: Our Language has no distinct Term to express Roundness in this Sense; the Figure is by Mathematicians called a Cylinder, from a *Greek* Word signifying to roll; a Body of this Figure being the best adapted to that Sort of Motion.

pressed

pressed by their opposite marginal Sides, that the Substance of the Leaf becomes greater than the Disk.

Plane, level; when they have both Surfaces every where parallel.

Gibbous, bunched; when by the Plenty of Pulp both the Surfaces are rendered convex.

Convex, rounding; when the Disk rises higher than the Sides.

Deprest, pressed down; when the Sides rise higher than the Disk.

Canaliculate, channelled; when a deep Furrow runs along it, and sinks it almost to a half Cylinder.

Ancipites, double-faced; when the Disk is convex, and there are two prominent longitudinal Angles.

Ensiform, Sword-shaped; when they are Ancipites, and grow narrower from the Base to the Apex.

Acinaciform, Faulchion or Scimitar-shaped; when they are fleshy and compressed, with one Edge convex and narrow, and the other straighter and broader.

Dolabriform, Hatched-shaped; when their Figure is roundish, compressed and obtuse gibbous outwardly with a sharp Edge, and taper towards the lower Part.

Lingueform, Tongue-shaped; when they are linear,

linear, fleshy, obtuse, convex underneath, and often with a cartilaginous Margin.

Triquetrous, three-cornered ; when they are subulate ; and have three flat longitudinal Sides.

Sulcate, furrowed ; when they are scored longitudinally with numerous Angles or Ridges, and as many Hollows or Channels betwixt them.

Carinate, keeled ; when the prone Part of the Disk is prominent longitudinally.

Membranaceous ; when they have no perceptible Pulp between the two Surfaces.

C H A P. VI.

Of COMPOUND Leaves.

A Leaf is said to be Compound, when there are more than one upon a Petiole or Footstalk.

COMPOUND Leaves are to be considered in respect to *Structure* and *Degree*.

By the *STRUCTURE* of a compound Leaf is to be understood the Insertion of the Folioles, or lesser Leaves, of which it is compounded ; and in this respect Leaves are called,

Compound ;

Compound; when a single Petiole furnishes more than one Leaf.

Articulate, jointed; when one Leaf grows out of the Top of another.

Digitate, fingered; when the Apex of a single Petiole connects many Folioles: And they are termed *Binate*, *Ternate*, or *Quinate*, growing *two*, *three*, or *five* together, according to the Number of Folioles, of which the digitate Leaf consists.

Pinnate, winged; when the Sides of a single Petiole connect many Folioles.

Pinnate with an *odd* one; when it is terminated by an odd Foliole.

A *Cirrbose* Pinnate Leaf; when it terminates in a Cirrhus or Clasper.

An *Abrupt* Pinnate Leaf; when it is terminated neither by a Foliole nor Cirrhus.

Oppositely Pinnate; when the Folioles stand opposite to each other.

Alternately Pinnate; when the Folioles are produced alternately.

Interruptedly Pinnate; when the Folioles are alternately less.

Articulately Pinnate; when the Petiole common to all the Folioles is articulate, jointed.

Decursively Pinnate; when the Folioles are decurrent,

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decurrent, running down; that is, extend themselves downwards along the Petiole.

Conjugate; when the pinnate Leaf consists of two Folioles only.

DEGREE, in a compound Leaf, respects the Subdivision of the common Petiole. In respect to which, Leaves are,

Decompound; when a Petiole once divided connects many Folioles.

Bigeminate; when a dichotomous * Petiole connects four Folioles on its Apices.

Biternate, or *Duplicato-Ternate*; when there are three Folioles on a Petiole, and each Foliole is Ternate; as in *Epimedium*.

Bipinnate, or *Duplicato-Pinnate*; when the Folioles of a pinnate Leaf are pinnate.

Pedate, *Foot-shaped* or *Branching*; when a bifid Petiole connects many Folioles on its Inside only; as in *Passiflora* and *Arum*.

Supra-decompound; when many Folioles are born on a Petiole, that has been any Number of Times subdivided.

Triternate, or *Triplicato-Ternate*; when a Petiole bears three Folioles that are each of them ternate.

Tripinnate, or *Triplicato-Pinnate*; when a Petiole bears many Folioles, each of which are Bipinnate.

* Forked or halved, and each Division forked again.

C H A P. VII.

Of DETERMINATE Leaves.

BY the DETERMINATION of Leaves is to be understood their Character, expressed from some Circumstance foreign to their own particular Structure or Configuration; as from their *Place, Situation, Insertion, or Direction.*

By the *PLACE* of a Leaf is meant the Part where it is fastened to the Plant. In respect to which, Leaves are called,

Seminal, Seed Leaves; which before were the Cotyledons, and are the first which appear.

Radical, Root Leaves; such as proceed from the Root.

Cauline, Stem Leaves; such as grow on the Stem.

Rameous, Branch Leaves; such as grow on the Branches.

Axillary *, such as are placed at the coming out of the Branches.

Floral, Flower Leaves; such as are placed at the coming out of the Flower.

* From *Axilla*, an *Armpit*.

By *SITUATION* is meant the Disposition of the Leaves on the Stem of the Plant. In respect to which, Leaves are called,

Stellate, starry ; or *verticillate, whorled* ; when the Stalk is surrounded in Whorles by more than two Leaves : And these again receive the Denomination of *Tern, Quatern, Quine, Sene, &c.* according to the Number of Leaves of which the Star or Whorl is composed ; as in *Nerium, Brabejum* and *Hippuris*.

Opposite ; when the Cauline Leaves come out in Pairs facing each other, and each Pair is crossed by the next, so that they point four different Ways.

Alternate ; when they come out singly ; and follow in a gradual Order.

Sparsed, scattered ; when they come out in Plenty about the Plant without Order.

Confert, crowded ; when they come out in Quantities, so as almost to cover the Branches, and leave hardly any Space between them.

Imbricate ; when they are confert and erect, so as to lie over one another, each covering a Part of the following one.

Fasciculate, bundled ; when many come out from the same Point ; as in *Larix*.

Distich, in two Rows ; when the Leaves
all

all respect two Sides of the Branches only ; as in *Abies* and *Diervilla*.

In respect to their *INSERTION* (which is usually at the Base) Leaves are called,

Peltate, *Shield-fashioned* ; when the Petiole is inserted into the Disk of the Leaf, and not into its Base or Margin ; as in *Nymphæa*, *Hernandia* and *Colocasia*.

Petiolate ; when there is a Petiole fastened to the Leaf at the Margin of the Base.

Sessile, *squat* ; when the Leaf has no Petiole, but is fastened immediately to the Stem.

Decurrent, *running down* ; when the Base of a sessile Leaf extends itself downwards along the Stem beyond the proper Base or Termination of the Leaf ; as in *Verbesina*, *Carduus* and *Sphæranthus*.

Amplexicaul, *embracing the Stalk* ; when the Base of the Leaf embraces the Sides of the Stem crosswise on both Sides ; or *Semiamplexicaul*, *half embracing the Stalk* ; which only differs from *Amplexicaul*, in that it is in a less Degree.

Perfoliate ; when the Base of the Leaf is continued across the Stem till it meets again, so as to embrace it all round ; as in *Bupleurum*.

Connate, *growing together* ; when two opposite

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posite Leaves join, and are united in one ; as in *Lonicera* and *Eupatorium*.

Vaginant, forming a *Vagina* or Sheath ; when the Base of the Leaf forms a cylindric Tube that invests the Branch.

In respect to their *DIRECTION*, Leaves are called,

Adverse ; when their Sides are not turned towards Heaven, but towards the South ; as in *Amomum*.

Oblique ; when the Base of the Leaf looks towards Heaven, and the Apex or Tip towards the Horizon ; as in *Protea* and *Fritillaria*.

Inflex, bending inwards ; when the Leaf is bowed upwards towards the Stem.

Adpressed ; when the Disk of the Leaf lies close to the Stem.

Erect, upright ; when the Angle they form with the Stem is extremely small.

Patent, spreading ; when they make an acute Angle with the Stem.

Horizontal ; when they stand at right Angles with the Stem.

Reclined, or, as some term it, *Reflex* ; when they are bowed downwards, so that the Apex or Tip is lower than the Base.

Revolute, rowled back ; when they are rowled downwards.

Dependent,

Dependent, hanging down; when they point directly to the Ground.

Radicant, rooting; when the Leaves strike Root.

Natant, floating; when they lie on the Surface of the Water; as in *Nymphæa* and *Potamogeton*.

Demerse, sunk; when they are hid beneath the Surface of the Water.

C H A P. VIII.

Of the FULCRA of Plants.

FULCRUM, a *Prop*, is a Term used to express those small Parts of Plants, of which the chief Use is to strengthen and support them.

Fulcra are of seven Kinds, viz. *Stipula*, *Bractea*, *Spina*, *Aculeus*, *Cirrbus*, *Glandula*, and *Pilus*; all which we shall explain in their Order.

STIPULA, is a Scale or small Leaf, stationed on each Side the Base of the Petioles or Peduncles when they are first appearing; as in *papilionaceous* Flowers; and also in *Tamarindus*, *Cassia*, *Rosa*, *Melianthus*,
Lirio-

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Liriodendron, Armeniaca, Persica, Padus, and others.

BRACTEA, a *floral Leaf*, is so called when it differs in Shape and Colour from the rest; as in *Tilia, Fumaria bulbosa, Stoechas*, and *Horminum*.

SPINA, a *Thorn*, is a kind of sharp Weapon or Armature, protruded from the Wood of the Plant; as in *Prunus, Rhamnus, Hippophaë, Celastrus* and *Lycium*: It will often disappear by Culture; as in *Pyrus*.

ACULEUS, a *Prickle*, is the same Sort of Armature, proceeding from the Cortex of the Plant only; as in *Rosa, Rubus, Ribes*, and *Berberis*.

CIRRHUS, a *Clasper*, or *Tendrill*, is a filiform spiral Band, by which a Plant fastens itself to any other Body; as in *Vitis, Bannisteria, Cardiospermum, Pisum*, and *Bigonia*.

GLANDULA, a *little Gland*, is a kind of Pap or Teat, serving for the Excretion of some Humour: Its Situation is commonly on the Petioles, the Serratures of the Leaves, or the tender Stipulæ.

PILUS, a *Hair*; is a sort of Bristle, serving as an excretory Duct to the Plants.

CHAP.

C H A P. IX.

Of the HYBERNACULA of Plants.

THE HYBERNACULUM, *Winter-lodge*, is that Part of a Plant which incloses and protects the Embryo or future Shoot from external Injuries. It is of two kinds, viz. *Bulbus*, a *Bulb*; and *Gemma*, a *Bud*.

A *BULB*, is an *Hybernacle*, placed on the descending Caudex: It is of various Kinds, viz. a *squamosæ* Bulb, when it consists of *imbricate Lamellæ* *: as in *Lilium*; a *solid* Bulb, when it consists of a *solid* Substance; as in *Tulipa*: a *tunicate* Bulb, when it consists of many *Tunics* or Coats; as in *Cepa*: and an *articulate* or jointed Bulb, when it consists of *Lamellæ* that are linked together; as in *Lathræa*, *Martynia*, and *Adoxa*.

GEMMA, a *Bud*, is an *Hybernacle* placed on the ascending Caudex: It consists either of *Stipulæ*, of *Petioles*, of the *Rudiments* of *Leves*, or of *cortical squamæ* †.

* Thin-Plates or Scales.

† Scales of the Bark.

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Buds are of various Kinds. In the Generality of Plants, they are *Foliifero*, *floriferous*, producing both Leaves and Flowers; but in *Alnus* they bear Leaves only; in *Populus*, *Fraxinus*, and some Species of *Salix*, they bear *Leaves* and *Flowers* distinctly; in *Corylus* and *Carpinus*, Leaves and *female* Flowers; in *Pinus* and *Abies*, Leaves and *male* Flowers; and in *Daphne*, *Ulmus*, *Cornus*, and *Amygdalus*, Leaves and *hermaphrodite* Flowers: In *Dentaria*, *Ornithogalum*, *Lilium*, and *Saxifraga*, the Buds are *deciduous*.

In several Plants there are *no* Buds; as in *Philadelphus*, *Frangula*, *Alaternus*, *Paliurus*, *Jatropha*, *Hibiscus*, *Bahobab*, *Justicia*, *Cassia*, *Mimosa*, *Gleditsia*, *Erythrina*, *Anagyris*, *Medicago*, *Nerium*, *Viburnum*, *Rhus*, *Tamarix*, *Hedera*, *Erica*, *Malpighia*, *Lavatera*, *Solanum*, *Asclepias*, *Ruta*, *Geranium*, *Petiveria*, *Pereeskia*, *Cupressus*, *Thuja*, and *Sabina*.

In cold Countries there are but few Plants without Buds; and in hot Countries but few that have any.

C H A P. X

Of the HABIT of Plants.

BY the H A B I T, or external Face of Plants, is to be understood a certain Conformity between Vegetables that belong to the same Genus, or are *near of Kin* to each other *. This Conformity may be in respect to various Circumstances ; as *Placentation, Radication, Ramification, Interfion, Gem-*

* This Definition of the Habit of Plants, which we have taken from the *Philosophia Botanica*, seems to agree better with the old State of Botany, when Plants were actually ranged according to their external Face, than with the modern System that ranges them by the Fructification : For Plants that by the System are neither of the same Genus, nor have any systematic Affinity, will often have a great Conformity in their Habit ; whilst those of the same Genus shall have their Habits distinct. The Habits of Plants was the Invention of the earlier Botanists, who knew no better Rule for the Distribution of Vegetables : And indeed *Linnaeus* himself is induced to admit, that it is often a good Guide ; and that *Caspar Baubin*, and others, had in many Cases discovered the Affinity of Plants by the Habit, when Systematists had failed in attempting the same by their artificial Rules ; nor does he think even the Fructification, which is the Invention of the Moderns, sufficient for detecting all the Classes of Vegetables, though he considers it as the primary Guide to the natural Method so much sought after by those who have cultivated this Science.

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mation, Foliation, Stipulation, Pubescence, Glandulation, Lactescence, Inflorescence, &c. As each of the Terms here enumerated will furnish us with a separate Chapter, we shall forbear the Explanation of them here.

C H A P. XI.

Of PLACENTATION.

BY PLACENTATION * is meant the Disposition of the *Cotyledons* at the Time when the Seed is beginning to grow. Plants, in respect to *Placentation*, are term'd,

1. *ACOTYLEDONES*, without *Cotyledons*, when this Part is wanting; as in *Mosses*.

2. *MONOCOTYLEDONES*, with a single *Cotyledon*†; and these are either,

Perforate; as in *Grasses*.

Unilateral; as in *Palms*; or,

Reduced; as in *Cepa*.

* The *Cotyledons* of the Seed in Vegetables answer the Purpose of the *Placenta* in the Animal Oeconomy; and hence the Disposition of the *Cotyledons* is called *Placentation*.

† *Linnaeus* observes, that the *Monocotyledones* are properly *Acotyledones*; the *Cotyledons* remaining within the Seed.

3. DI-

3. *DICOTYLEDONES*, having *two Cotyledons*; and these are either,

Immutate, unchanged; as in the Class *Didynamia*; and in Plants, whose *Pericarpium* is a *Legumen, Pomum, or Drupa* †.

Plicate, folded; as in *Gossypium*.

Duplicate, doubled; as in *Malva*; and in the Class *Tetradynamia*.

Obvolute, rowled up; as in *Helxine*.

Spiral, turning like a Skrew; as in *Salsola, Salicornia, Ceratocarpus, Basella*, and all *Oleraceous Plants* ‡; or,

Reduced; as in *umbellate Plants*.

4. *POLYCOTYLEDONES*, with *many Cotyledons*; as in *Pinus, Cupressus, and Linum*.

† See these Terms explained in Part I. Chap. 6.

‡ Pot Herbs. The *Oleraceous Plants* make an Order in the *Fragmenta Methodi Naturalis* of *Linnaeus*; consisting of *Spinacia, Blitum, Beta, Galenia, Atriplex, Chenopodium, Rivina, Petiveria, Herniaria, Illecebrum, Polycnemum, Axyris, Achyranthes, Amaranthus, Gomphrena, Celosia, Ceratocarpus, Corispermum, Callitriche, Salsola, Salicornia*, and *Anabasis*.

C H A P. XII.

Of RADICATION.

BY RADICATION is meant the Disposition of the *Root* of the Plant ; which is to be considered in respect to the ascending and descending Caudex and the Radicles ; as has been shewn in Chap. 2. where the principal Characters of Roots have been explained. Roots are farther distinguished into,

BULBOSE, consisting of a *Bulb* ; and these are either,

Squamosæ, *Scaly* ; as in *Lilium*.

Tunicate, *coated* ; as in *Cepa*.

Duplicate, *double* ; as in *Fritillaria* ; or,
Solid ; as in *Tulipa*.

TUBEROSE, *knobbed* ; and these are either,

Palmate, *handed* ; as in *Orchis*.

Fasciculate, *bundled* ; as in *Pæonia* ; or,

Pendulous, *hanging* ; as in *Filipendula*, and *Elæagnus*.

ARTICULATE, *jointed* ; as is *Lathræa*, *Oxalis*, *Martynia*, and *Dentaria*.

FUSIFORM, *Spindle-shaped* ; as in *Pastinaca*, *Daucus*, and *Raphanus*.

GLO-

GLOBOSE, *Globe-shaped*; as in *Bunium*; and in some Species of *Ranunculus*, and *Cbærophyllum*.

CHAP. XIII.

Of RAMIFICATION.

RAMIFICATION is the Manner in which a Tree produces its *Branches*, with the Situation of which that of the *Leaves* is also connected *.

Some Plants have no *Branches*, though they have *Leaves* which are placed on the Stem. This is the Case with *Dictamnus*, *Pæonia*, *Epimedium*, and *Podophyllum*.

* The Doctrines delivered here under the Head of *Ramification* do not answer to the Title, the greater Part respecting rather the Situation of the *Leaves* than that of the *Branches*: They might, with more Propriety, have been collected under a Head of *Foliation*; but as the Term *Foliation* is used to express the Habit of Plants, in respect to the Position of Leaves in the Bud before they disclose themselves, as will be shewn in Chapter 16. these Doctrines could not have stood under the same Head, without a Confusion in the Use of the Term; and this seems to be the Reason why *Linnaeus*, whom we follow, has given them in this Place.

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Leaves *opposite* or *alternate* are generally a Mark of great Difference in Plants : A few Genera however must be excepted, which have some Species with opposite Leaves, and others with alternate ; as in *Euphorbia*, *Cistus*, *Lantana*, *Antirrhinum*, *Lilium*, and *Epilobium*.

In *Antirrhinum*, *Jasminum*, *Veronica* and *Borago*, the lower Leaves at the Branches are *opposite*, and the upper ones at the Flowers *alternate*.

In *Potentilla supina*, and in *Potamogeton*, the lower Leaves are *alternate*, and the upper ones on the Branches *opposite*.

In *Nerium* the lower Leaves are *opposite*, and the upper ones *tern*.

In *Ruscus* the lower Leaves are *tern*, and the upper ones *alternate*.

In *Coreopsis alternifolia*, and in *Antirrhinum chalepense*, the lower Leaves are *quatern*, and the upper ones *alternate*.

The *natural* Situation of the Leaves in Plants that are much branched is best concluded from the *radical* Leaves.

C H A P. XIV.

Of INTORSION.

INTORSION, *Winding*, is the Flexion or Bending of any Part of a Plant towards one Side.

CAULES volubiles, twining Stems, wind either,

Sinistrorsum, to the *Left*; as in *Tamus*, *Dioscorea*, *Rajania*, *Menispermum*, *Cissampelos*, *Hippocratea*, *Lonicera*, *Humulus* and *Helxine*; or,

Dextrorsum, to the *Right*; as in *Phaseolus*, *Dolichos*, *Clitoria*, *Glycine*, *Securidaca*, *Convolvulus*, *Ipomœa*, *Cynanche*, *Periploca*, *Ceropegia*, *Euphorbia*, *Tragia*, *Basella*, *Eupatorium*, and *Tournefortia*.

CIRRHI volubiles, twining Claspers, wind to the *Right*, and *back* again. Most *leguminose* Plants have *Cirrhi* of this Kind: In *Smilax*, and in most Species of *Piper*, the *Petioles* are *cirrhiferous*.

COROLLÆ bend to the *Left* * in *Asclepias*, *Nerium*, *Vinca*, *Rauwolfia*, *Periploca*,

* Supposing yourself placed in the Center, and looking towards the South.

and

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and *Stapelia*; and to the *Right* in *Pedicularis*.

In *Trientalis* there is this Singularity, that the Petals are all *Imbricate*, one Side of each folding over the next towards the *Right*.

In *Gentiana*, the Imbrication of the Petals before they are unfolded is contrary to the Sun.

PISTILLA incline to the *Left* in *Cucubalus* and *Silene*.

GERMINA are twisted to the *Left* in *Helicteres* and *Ulmaria*.

FLOWERS, in respect to *Intorsion*, have,

A *Resupination* * ; which is, when the upper Lip of the Corolla looks towards the Ground, and the under Lip towards Heaven; as in the *European Viola*, *Ajuga orientalis*, *Ocymum*, and some Species of *Satyrrium*; or,

An *Obliquity* ; as in the Species of *Hyssopus* called *Lophanthus*, *Nepeta sibirica*, and some Species of *Pedicularis*.

SPICÆ, *Spikes*, are,

Spiral; as in *Claytonia*, and in some *Asperifolious* † Plants ; or, *Incurvate*, *crooked* ; as

* *Resupination*, is when any Thing is thrown on its Back, or lies Face upwards.

† The *Asperifolia* belong to the Class *Pentandria*. See Part II. Chap. 8.

in *Saururus*, *Mimosa*, *Petiveria*, *Papaver*, *Sedum rubrum*, and *Lilium martagon*.

In several Plants there is found a *Contorsion* of the Fibres, which answers the End of an *Hygrometer* *. Thus in *Avena*, there is an *Arista* or Beard that is twisted like a Rope; in some *Geraniums*, the *Arillus* of the Seed has a spiral Tail; and in *Mnium*, the Peduncles are twisted contrary ways above and below.

CHAP. XV.

Of GEMMATION.

GEMMATION is the Construction of the *Gem* or *Bud*, which is formed either of *Leaves*, *Stipulæ*, *Petioles* or *Squamæ*. Those that are formed of Leaves will be considered in the next Chapter, under the Head of *Foliation*; the rest are distinguishable into,

* An Instrument for measuring the Degree of Dryness or Moisture of the Air. The Fibres of the Plants here instanced being affected by the Quality of the Air, the spiral Part twists or untwists as the Weather varies; and by observing this, the Temperature of the Air may be discovered.

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PETIOLAR Buds, which are either,

Opposite; as in *Ligustrum*, *Phillyrea*, *Nyc-tantbes*, *Syringa*, *Hypericum*, *Coriaria*, *Buxus*, *Jasminum*, *Vaccinium*, *Arbutus*, *Andromeda*, *Ledum*, *Daphne*, *Laurus*, *Myrica*, *Linnæa*, *Diervilla*, *Lonicera*, *Euonymus*, *Fraxinus*, *A-cer*, *Esculus*, *Bignonia*, *Opulus*, *Sambucus*, and *Pfidium*; or,

Alternate; as in *Salix*, *Spiræa*, *Genista*, *Salanum*, *Hippophaë*, *Berberis*, *Ilex*, *Ribes*, *Juglans*, *Pistacia*, and *Plumbago*.

STIPULACEOUS Buds; which are either,

Opposite; as in *Cephalanthus* and *Rhamnus catharticus*; or,

Alternate; as in *Populus*, *Tilia*, *Ulmus*, *Quercus*, *Fagus*, *Carpinus*, *Corylus*, *Betula*, *Alnus*, *Ficus*, and *Morus*.

STIPULACEO-PETIOLAR Buds; which are,

Alternate; as in *Sorbus*, *Cratægus*, *Prunus*, *Mespilus* germ. *Pyrus*, *Malus*, *Cotoneaster*, *A-mygdalus*, *Cerasus*, *Padus*, *Meliantbus*, *Rosa*, *Rubus*, *Vitis*, *Robinia*, *Cytisus*, *Potentilla fruticosa*, and *Staphylea*.

ANOMALOUS, or *irregular Buds*; as in *Abies*, *Pinus*, and *Taxus*.

In many Plants the Buds are wanting, as has been shewn in Chap. 9.

CHAP.

C H A P. XVI.

Of FOLIATION.

BY FOLIATION is to be understood the *complicate* or folded State the Leaves are in, whilst they remain concealed within the *Buds* of the Plant*. Leaves, in respect to the Manner of their *Complication*, are either,

INVOLUTE, rowled in; when their lateral Margins are rowled spirally inwards on both Sides; as in *Lonicera*, *Diervilla*, *Eunonymus*, *Rhamnus catharticus*, *Pyrus*, *Malus*, *Populus*, *Plumbago*, *Viola*, *Commelina annua*, *Plantago*, *Alisma*, *Potamogeton natans*, *Nymphaea*, *Saururus*, *Aster annuus*, *Humulus*, *Urtica*, *Hepatica*, *Sambucus ebulus*, and *Staphylea*.

REVOLUTE, rowled back; when their lateral Margins are rowled spirally backwards on both Sides; as in *Rosmarinus*, *Teucrium marum*, *Dracocephalon digit.* *Nerium*, *Andromeda*, *Ledum*, *Epilobium irregul.* *Ru-*

* *Linnaeus* claims the Invention of the Distinctions given in this Chapter, preceding Botanists not having (as he says) attended to the *Foliation* in *Buds*.

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mex, *Perficaria*, *Polygonum*, *Parietaria*, *Primula*, *Carduus*, *Cnicus*, *Tussilago*, *Senecio*, *Othonna*, *Potentilla fruticosa*, *Ptelea*, and some Species of *Salix*.

OBVOLUTE, rowled against each other ; when their respective Margins alternately embrace the strait Margin of the opposite Leaf ; as in *Dianthus*, *Lychnis*, *Saponaria*, *Epilobium oppositif.* *Dipsacus*, *Scabiosa*, *Valeriana*, *Marrubium*, *Phlomis*, *Salvia*, and *Prasium*.

CONVOLUTE, rowled together ; when the Margin of one Side furrounds the other Margin of the same Leaf, in the Manner of a Cawl or Hood ; as in *Canna*, *Amomum*, *Calla*, *Arum*, *Piper*, *Hydrocharis*, *Commelina lutea*, *Prunus*, *Armeniaca*, *Dodecatheon*, *Crepis*, *Lactuca*, *Hieracium*, *Sonchus sibir.* *Tragopogon*, *Orobis*, *Vicia*, *Lathyrus*, *Solidago*, *Aster*, *Pinguicula*, *Vaccinium*, *Pyrola*, *Berberis*, *Brassica*, *Armoracia*, *Symphytum*, *Cynoglossum*, *Potamogeton perfol.* *Eryngium*, *Menyanthes*, *Saxifraga*, *Aralia*, *Dictamnus*, *Epimedium*, and many Grasses.

IMB ICATE ; when they are parallel, with a strait Surface, and lie one over the other ; as in *Syringa*, *Ligustrum*, *Phillyrea*, *Nyctanthus*, *Linnæa*, *Cephalanthus*, *Coriaria*, *Hypericum*, *Valantia*, *Justicia*, *Portulaca*, *Laurus*,

rus, Daphne, Hippophaë, Ruscus, Cyanus perennis, Mespilus germ. Campanula, Polemonium, and Sium.

EQUITANT, *riding*; when the Sides of the Leaves lie parallel, and approach in such manner, as the outer embrace the inner; (which is not the case with the *Conduplicate* explained in the next Head) as in *Hemerocallis, Iris, Acorus, Carex, Poa*, and some *Grasses*.

CONDUPLICATE, *doubled together*; when the Sides of the Leaf are parallel, and approach each other; as in *Quercus, Fagus, Corylus, Carpinus, Tilia, Padus, Cerasus, Amygdalus, Cotoneaster, Frangula, Alaternus, Paliurus, Juglans, Pistacia, Rhus, Fraxinus, Sorbus, Rosa, Rubus, Potentilla vulg. Comarum, Bignonia, Cytisus, Robinia, Pisum, Melianthus, Pastinaca, Heracleum, Laspitium Poterium*, and most *Diadelphious* Plants.

PPLICATE, *plaited*; when their Complication is in Plaits lengthways, like the plicate Leaves explained in Chap. 5. as in *Cratægus, Betula, Alnus, Fagus, Vitis, Acer, Opulus, Viburnum, Ribes, Althæa, Malva, Humulus, Urtica, Passiflora* and *Alchemila*.

RECLINATE, *reclined*; when the Leaves are reflexed downwards towards the Petiole;

as

as in *Podophyllum*, *Aconitum*, *Hepatica*, *Pulsatilla*, *Anemone*, and *Adoxa*.

CIRCINAL, compassed * ; when the Leaves are rowled in spirally downwards ; as in *Filices*, and some *Palms*.

* In Rings.

C H A P. XVII.

Of STIPULATION.

BY STIPULATION is meant the Situation and Structure of the *Stipulae** at the Base of the Leaves.

The *Stipulae* in different Plants are found to be as various as the Leaves. They are,

WANTING in the *Asperifoliae* †, the Class *Didynamia*, the *Stellateae* ‡, *Siliquosae* ||, *Liliaceae* §, *Orchideae* ¶, and in most compound Flowers.

PRE-

* See Chapter 8.

† *Pentandria Monogynia*, Distinction 1. See Part II. Chap. 8.

‡ *Tetrandria Monogynia*, Distinction 2. See Part II. Chap. 7.

|| *Tetradynamia Siliquosa*. See Part II. Chap. 18.

§ *Lilium*, *Fritillaria*, *Tulipa*, and *Erythronium*, are the *lilaceous* Plants ; which make an Order in the *Methodi naturalis fragmenta*. See *Phil. Bot.* page 28.

¶ *Orchis*, *Satyrium*, *Serapias*, *Herminium*, *Neotia*, *Ophrys*, *Cypri-*

PRESENT in the *Papilionaciæ**, *Lomentaceæ*†, and in the Class *Icosandria*.

GEMINÆ, two together, or with a single one on each Side in *most* Plants.

SOLITARY, in *Meliantbus*, in which the *Stipula* is on the Inside; and *Ruscus*, in which it is on the Outside.

DECIDUOUS, in *Padus*, *Cerasus*, *Amygdalus*; and also ‡ in *Populus*, *Tilia*, *Ulmus*, *Quercus*, *Fagus*, *Carpinus*, *Corylus*, *Betula*, *Alnus*, *Ficus*, and *Morus*.

PERSISTING, in the Class *Diadelphia*, and in *Icosandria Polygynia*.

ADNATE, growing *close* to the Plant, in *Rosa*, *Rubus*, *Potentilla*, *Comarum*, and *Meliantbus*.

SOLUTE, *free* or *loose*, in *most* Plants.

Cypripedium, *Epidendrum*, *Limodorum* and *Arethusa*, are the *Orchideæ*; which are another Order in the *Methodi naturalis frag.* See *Phil. Bot.* p. 27.

* Class *Diadelphia*. See Part II. Chap. 20.

† *Sophora*, *Cercis*, *Baubinia*, *Parkinsonia*, *Cassia*, *Poinciana*, *Tamarindus*, *Guilandina*, *Adenanthera*, *Hæmatoxylon*, *Cæsalpinia* and *Mimosa*. These are an Order in *M. n. frag.* See *Phil. Bot.* p. 34. They are called *Lomentaceous*, from *Lomentum*, which signifies *Bean Meal*.

‡ The Genera here instanced are the same with those enumerated in the 15th Chapter, as having stipulaceous Buds that are alternate, which are those referred to by *Linnaeus* in this Place.

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INTRAFOLIACEOUS, on the *Inside* of the Leaves, in *Ficus* and *Morus*.

EXTRAFOLIACEOUS, on the *Outside* of the Leaves, in *Alnus*, *Betula*, *Tilia*, and the Class *Diadelphia*.

C H A P. XVIII.

Of PUBESCENCE.

PUBESCENCE, *Downiness* *, is an Armature, by which Plants are defended from external Injuries. *Pubescence* is of the following Kinds, viz.

SCABRITIES, *Roughness*; which is composed of Particles scarce visible to the naked Eye †, that are scattered over the Surface of the Plant. This is distinguishable into,

1. *Scabrities GLANDULOSA*, a *glandulose Roughness*; when it consists of little Glands, which are either,

Miliary, like Grains of Millet.

* The Term *Downiness* is not to be taken here in too strict a Sense, as the following Explanations shew.

† *Guetardus* was the first who carefully examined this kind of Pubescence.

Vesicular, composed of *Bladders*.

Lenticular, resembling *Lentils*.

Globular, *Globe-shaped*; as in *Atriplex* and *Chenopodium*.

Secretory, serving for *Secretion*.

Catenulate, consisting of little *Chains*; or,

Utricular, like little *Bottles*.

2. *Scabrities* SETACEA, a *bristly Roughness*; when it consists of *Bristles*, which are either,

Cylindric, like a *Cylinder*.

Conic, like a *Cone*.

Hamosæ, *hooked*.

Glanduliferous, bearing *Glands*.

Furcate, *forked*.

Securiform, *Hatchet-shaped*; as in *Humus*.

Aggregate and *Starry*; as in *Alyssum* and *Helicteres*; or,

Aggregate and *Simple*; as in *Hippophaë*.

3. *Scabrities* ARTICULATA, a *jointed Roughness*; when it is in *Joints*, which are either,

Simplices, *simple*.

Nodosæ, *knotty*.

Caudate, *tailed*.

Ramosæ, *branching*; as in *Verbascum*; or,

Plumosæ, *feathery*.

LANA, Wool, is a Protection to many Plants against the scorching Heats; as in *Sideritis Canariensis*, *Salvia Canariensis*, the *Salvia* called *Æthiopis*, *Marrubium*, *Verbascum*, *Stachys*, the *Carduus* called *Eriocephalus** and *Onopordum*.

TOMENTUM, Down, is a Defence for Plants against Winds; it has commonly a whitish or hoary Appearance; as in *Tomex*, *Medicago*, and *Halimus*.

STRIGÆ †, with their stiff Bristles, are of use to prevent Plants from being bruised or destroyed by Vermin; as in *Cactus*, *Malpighia*, *Hibiscus*, and *Rubus*.

HAMI, Hooks, fasten themselves to Animals as they pass by; these are either,

Triglochid, three pointed; as in *Lappula*; or,

* There is a Genus intituled, *Eriocephalus*, but the Plant here meant is the *Carduus Eriophorus* of *Lin. Species Plant.* page 823, which is the *Carduus capite rotundo tomentoso* of *Cass. Bauhin*: It was formerly called *Corona fratrum*.

† *Linnaeus* seems to have omitted the Definition of this Term. It signifies properly a Row, or ordinate Disposition of Things of any Sort; and appears, by the Instances here given, to be applied to Thorns or Prickles that come out in Rows, or in some regular Order. No *English* Word occurs that is exactly expressive of the Term in this Sense.

Incurvate, crooked; as in *Arctium*, *Mar-rubium*, *Xanthium*, and *Petiveria*.

STIMULI, Stings, keep off naked Animals by their venomous Punctures; as in *Urtica*, *Jatropha*, *Acalypha*, and *Tragia*.

ACULEI, Prickles, keep off particular Animals; as in *Volkameria*, *Pisonia*, *Cæsalpinia*, *Mimosa*, *Parkinsonia*, *Capparis*, *Erythryna*, *Robinia*, *Solanum*, *Cleome*, *Smilax*, *Convolvulus*, *Aralia*, *Duranta*, *Xylon*, *Drypis*, *Euphorbia*, *Tragacantha*, and *Tragopogon*. In *Hugonia* the *Aculei* are spiral or cirrbose †.

FURCÆ, Forks; are a Defence against Animals in general; as in *Berberis*, *Ribes*, *Gleditsia*, *Mesembryanthemum*, *Osteospermum*, *Ballota*, *Barleria*, *Fagonia*, and *Poterium*.

SPINÆ, Thorns, serve to keep off Cattle. These are either,

On the Branches; as in *Pyrus*, *Prunus*, *Citrus*, *Hippophaë*, *Gmelina*, *Rhamnus*, *Lycium*, *Catesbæa*, *Celastrus*, *Ulex*, *Asparagus*, *Spartium*, *Achyronia*, *Ximenia*, *Ononis*, *Stachys*, *Alyssum*, and *Cichorium*.

On the Leaves; as in *Aloë*, *Agave*, *Yucca*, *Ilex*, *Hippomane*, *Theophrasta*, *Carlina*, *Cynara*, *Onopordum*, *Morina*, *Acanthus*, *Gun-*

† From *Cirrhus*, a Clasper or Tendril.

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delia, Juniperus, Salsola, Polygala, Ruscus, Borbonia, Statice, Ovieda, and Cliffortia.

On the *Calyx*; as in *Carduus, Cnicus, Gentaurea, Moluccella, and Galeopsis*; or,

On the *Fruit*; as in *Trapa, Tribulus, Murex, Spinachia, Agrimonia, and Datura.*

CHAP. XIX.

Of GLANDULATION.

GLANDULATION respects the secretory Vessels; which are either *Glandules, Follicles, or Utricles.*

GLANDULES * are either,

Petiolar, when they are on the *Petioles*; as in *Ricinus, Jatropha, Passiflora, Cassia, and Mimosa.*

Foliaceous, when they are produced from the *Leaves*: And these are either from the *Serratures*, as in *Salix*; from the *Base*, as in *Amygdalus, Cucurbita, Ekeocarpus, Impatiens, Padus, and Opulus*, from the *Back*, as in *Urena, Tamarix, and Croton*; or from the *Surface*, as in *Pinguicula, and Drosera.*

* See Chap. 8.

Stipular, when they are produced from the *Stipulae*; as in *Baubinia*, and *Armeniaca*.

Capillary, like *Hairs*; as in *Ribes*, *Antirrhinum quadrifolium*, *Schrophularia*, *Cerastium*, and *Silene*; or,

Pores only; as in *Tamarix* and *Silene viscaria*.

FOLLICLES *, are Vessels distended with Air; as in *Utricularia*, at the Root of which there are roundish Vessels that are inflate, and have two Horns; and in *Aldrovanda* also, at the Leaves of which there are Pot-shaped Follicles that are semicircular.

UTRICLES †, are Vessels filled with a secreted *Liquor*. Thus in *Nepenthes*, the Extremity of the Leaves terminate in a Thread, and this Thread terminates in a Cylinder, the Top of which is closed with a Lid that opens on one Edge; in *Sarracena* also, the Leaves are hooded almost like those of *Nepenthes*, but sessile at the Root; and in *Marcgravia*, from the Center of the Umbel there are Vessels produced, which resemble the ringent Corolla of the *Galeopsis*, but without the under Lip.

* The Word signifies a little Ball filled with Wind.

† The Word signifies a little Bottle.

C H A P. XX.

Of LACTESCENCE.

LACTESCENCE, *Milkiness*, is when a copious Juice flows out on any Injury done to the Plant. The Colour of the Liquor is either,

WHITE; as in *Euphorbia*, *Papaver*, *Asclepias*, *Apocynum*, *Cynanchum*, *Campanula*, *Lobelia*, *Jasione*, *Acer*, *Selinum*, *Rhus*, *Cactus mammillaris*, and the *Semiflosculose* Flowers of *Tournefort* *.

YELLOW; as in *Chelidonium*, *Bocconia*, *Sanguinaria*, and *Cambogia*; or,

RED; as in *Rumex sanguinea*,

* *Sonchus*, *Lactuca*, &c. These make one of the Classes of *Tournefort's* Inst. R. H.

CHAP. XXI.

Of INFLORESCENCE.

INFLORESCENCE, is the manner in which the Flowers are fastened to the Plant by the *Peduncle*. Plants, in respect to *Inflorescence*, are distinguished into,

VERTICILLATE, with the Flowers in *Whorls*; as in *Marrubium*.

CORYMBIFEROUS, bearing the Flowers in *Corymbi*; as in *siliquose* Plants *.

SPICATE, with the Flowers in *Spikes*; as in *Phytolacca*, *Arum*, *Phœnix*, *Piper*, &c.

PANICULATE, with the Flowers in *Panicles*; as in sundry of the *Grasses*.

AXILLARY Flowers are such as come out from the *Wings* of the Leaves or Branches, which is the most common Case.

OPPOSITIFOLIOUS, such as come out *opposite* to the Leaves; as in *Piper*, *Saururus*,

* *Myagrum*, *Anastatica*, &c. The *siliquose* Plants make an Order in the *Met. Nat. Frag.* See the *Phil. Bot.* page 34, where the Plants here meant are enumerated.

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Phytolacca, Dulcamara, Vitis, Cissus, Corchorus, Geranium, Ranunculus aquatilis, and the annual Species of *Cistus*.

INTERFOLIACEOUS, such as come out *between* the opposite Leaves, but are placed alternately ; as in *Asclepias*.

LATERIFOLIOUS, such as come out at the *Side* of the Base of the Leaf ; as in *Claytonia, Solanum*, and the *Asperifoliae* *.

PETIOLAR, when the Peduncle is inserted in the *Petiole* ; as in *Hibiscus*, and *Turnera*.

CIRRHIFEROUS, such as bear *Cirrhi* ; as in *Cardiospermum*, and *Vitis*.

SUPRA-AXILLARY, such as come out *above* the Wings ; as in the *Asperifoliae*, and in *Potentilla Monspeliensis*.

* *Pentandria monogynia*, Distinction 1st.

C H A P. XXII.

Of SPECIFIC DISTINCTIONS.

WE have treated of *Generic* Differences in the five last Chapters of the second Part of this Work ; we come now to treat of the *Specific* ones. For this a Foundation has been laid in the preceding Chapters of this third Part, by the Explanation of those Parts of the Vegetable, on which the Difference of the Species most commonly depends ; but it is necessary to observe, that the Fructification which we treated of in the first Part, as preparatory to the Distinctions of the Classes and Genera, has its Influence likewise in many Cases upon the Species, as will appear in the Course of this Chapter.

Generic Differences we have shewn to depend on the Form of the Fructification, and to be confined to that alone : Specific Differences take their Rise from any Circumstance, wherein Plants of the same Genus are found to disagree ; provided such Circumstance is constant, and not liable to Alteration by Culture or other Accidents.

Hence

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Hence *Linnaeus* asserts, the Species to be as many as there were different Forms of Vegetables produced at the Creation ; and considers all casual Differences as Varieties of the same Species.

Towards the End of the last Century, the Desire of encreasing the Number of Plants had so seized the Botanists of that Time, that new Species were established on too slight Differences, to the great Detriment of the Science ; and the same Eagerness led them also to set down as new Genera what should have been Species only. This Evil was in some Measure unavoidable, whilst there were no fixt Principles for the Regulation of the Science in this respect. A Remedy to it was first attempted by *Vaillant* ; afterwards by *Jussieu*, *Haller*, *Royenus*, *Gronovius*, and others ; and lastly by *Linnaeus*, whose Aphorisms have brought the Work much nearer to Perfection. Something indeed seems still wanting to complete these Doctrines ; but perhaps more is not to be expected till this Branch of natural Philosophy receives farther Assistance from Experiment.

We shall treat in this Chapter of those Circumstances by which *Species* are distinguished

guished with Certainty, reserving the *Varieties* for the Chapter following.

The *ROOT* often affords a real specific Difference *, and is sometimes the chief Distinction ; as in *Scilla*, where the Species are scarce to be distinguished, but by the Bulbs being *tunicate*, *solid*, or *squamosæ*; and in *Orchis*, where the Species are known by the Roots being *fibrosæ*, *round*, or *testiculate*; but as Access cannot always be conveniently had to this Part of the Plant, it is better to fix the specific Distinction on some other Circumstance, if the Case will admit of it.

The *TRUNK* often furnishes a sure Mark of Distinction. Thus in *Hypericum* ‖, *Convallaria* †, and *Hedysarum* ‡, there are

* In *Fumaria bulbosa*, the greater and less Sorts with a hollow Root, and the greater and less Sorts with a Root not hollow, appear by the whole Habit of the Plants to be Varieties only, as will be observed in the next Chapter.

‖ *Hypericum hirsutum* (Lin. Spec. Plant. 786.) caule tereti. *Hypericum perforatum* (Lin. Spec. Plant. 785.) caule ancipiti. *Hypericum quadrangulum* (Lin. Spec. Plant. 785.) caule quadrangulo.

† *Convallaria polygonatum* (Lin. Spec. Plant. 315.) caule ancipiti.

Convallaria multiflora (Lin. Spec. Plant. 315.) caule tereti.

‡ *Hedysarum triquetrum* (Lin. Spec. Plant. 746.) caule triquetro.

many

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many Species distinguishable by the *Angles* of the Stem; and in *Lupinus*, the Species are not easy to be known, except by the same Part being *simple* or *compound*. In *Eriocaulon*, the most remarkable Difference is in the *Culmus*, which is *quinquangular*, *hexangular*, *decangular*, &c. In *Pyrola*, some Species are distinguished by a *triquetrous Scapus*. In *Citrus*, the *Aurantium* is distinguished from its Congeners by its *Petioles*, which are winged or encreased by a Membrane on each Side; and in *Gomphrena*, there is a Species* distinguished by its *Peduncles* which are *Diphyllous*, being furnished with two opposite *Folioles* that are placed under the Head of the Flowers.

The *LEAVES* exhibit most natural and also most elegant specific Differences. These have been so amply treated off already, that it would be only Repetition to particularize or exemplify the numerous Cases that occur of such Distinctions.

FULCRA are generally a good Mark of Distinction, and must be carefully attended to by the Botanist for the Determination of the Species; as we shall shew by many Ex-

* *Gomphrena globosa* (Lin. Spec. Plant. 224.)

amples,

amples, where the Difference consists principally in those Parts of the Plant. Thus,

Aculei are remarkable in *Rubus*.

Spines in *Prunus*.

Braetæ in *Fumaria*, *Dracocephalon*, and the Indian Species of *Hedysarum*; to which must be added the *Coma*, which is a bushy Head, composed of *Braetæ* that are of a large Size, and terminate the Stem in *Corona imperialis*, *Lavandula*, and *Salvia*.

Glandules furnish the essential Mark in *Padus*, *Urena*, *Mimosa*, *Cassia*, and many other Genera, which it would be impossible to distinguish without being acquainted with this Part. They are found on the *Serratures* at the *Base* of the Leaves in *Heliocarpus*, *Salix*, and *Amygdalus*; on the *Back* of the Leaves in *Padus*, *Urena*, and *Passiflora*; and on the *Aculei* in *Bauhinia aculeata*, where by the Apex of the *Aculei* a Liquor is secreted. The *Amygdalus* is distinguished from *Perfica* only by the *Glandules* of the *Serratures*; nor could the Species of *Urena* be ever fixed without examining the *Glandules* of the *Leaves*. The *Convolvulus* with a tuberculate Calyx, is so variable in the Shape of its Leaves, that it seems divisible into many Species, yet is kept together by the *Glandules*: And there is a Species of *Monarda*,
distin-

distinguishable from its Congeners by the Glandules, that are sprinkled over the Corolla.

Stipulæ are of great consequence in many extensive Genera, where the Species are liable to Confusion. Thus in one Species of *Melianthus* the *Stipulæ* are *solitary*; in the other they are in *Pairs*; and the *Cassia auriculata* is rendered distinct from all its Congeners by the Shape of its *Stipulæ*, which are *reniform* and *barbate*.

HYBERNACLES afford likewise a certain specific Difference.

That *Gems* or *Buds* often differ greatly in the same Genus is proved by *Rhamnus*; in which the various Species, viz. *Cervispina*, *Alaternus*, *Paliurus*, and *Frangula*, have all a Difference in their *Buds*; and in that extensive and intricate Genus the *Salix*, the Species are by the Structure and Foliation of the *Buds* distinguished with great Certainty.

Bulbs also distinguish the Species, as is proved by *Scilla*, where they afford a real, and almost the only Distinction; and by their Situation in the *Axillæ* of the Leaves, they determine *Dentaria*, *Lilium*, *Ornithogalum*, *Saxifraga*, and *Bistorta*.

INFLO-

INFLORESCENCE affords the trueſt, and in moſt Genera the moſt elegant Diſtinction. Thus in *Spiræa*, the Flowers are in ſome Species *duplicato-racemoſe*; in others *corymboſe*; and in others again *umbellate*; without which Characters there would be no Certainty of the Species.

The *Peduncle* or Flower-ſtalk, which is the Foundation of the Characters of *Inflorefcence*, varies as to the Manner of its ſupporting the Flowers; and is ſaid to be,

Flaccid, wanting Firmneſs; when it is ſo weak as to be bowed down by the Weight of the Flower itſelf.

Cernuus, nodding; when it is incurvate at the *Apex*, ſo that the Flower inclines to one Side, or towards the Ground, and cannot preſerve an erect Poſture, by reaſon of the ſtrict Curvature of the Peduncle; as in *Carpesium*, *Bidens radiata*, *Carduus nutans*, *Scabioſa alpina*, *Helianthus annuus*, and *Cnicus ſibiricus*.

Bearing *Faſtigate* Flowers; when the *Pedicelli* *, or partial Foot-ſtalks elevate the Fructification into a *Faſcicle*, ſo that they are

* In this, and ſome other Places, the *Philophia Botanica* has *Petiole* for *Pedicellus*; but the latter is the proper Term for the partial Foot-ſtalk of a Flower. See Chap. 4.

of an equal Height at the Top, as if they had been shorn off horizontally ; as in *Dianthus* and *Silene*.

Patulus, spreading ; when it is branched out every Way, so that the Flowers stand remote from each other. This stands opposed to *coarctate, close*.

Bearing *conglomerate* Flowers ; when it is branched, and bears the Flowers in close compact Heaps, and is therefore opposed to a *diffuse Pannicle*.

Articulate, jointed ; when it is furnished with a *Joint* ; as in *Oxalis*, *Sida*, and *Hibiscus*.

Coming out in *Pairs* ; as in *Capraria*, and *Oldenlandia Biflora*.

Tern, or *three* from the same Axilla ; as in *Impatiens Triflora*.

Flexuose, bending divers Ways, or *undulate, waved* ; as in *Aira flexuosa*.

Remaining on the Plant after the Fructification is fallen ; as in *Jambolifera*, *Ochna*, and *Justicia*.

Incrassate, thickened towards the Flower ; as in *Cotula*, *Tragopogon*, and most *cernuous* Flowers.

The Parts of *FRUCTIFICATION*, often furnish most certain and constant specific Differences. *Linnaeus* tells us he was once
of

of a contrary Opinion ; and held, that as the Flower was of short Duration, and its Parts commonly very minute. Recourse should not be had to the Fructification for specific Differences, till all other Ways had been tried and found ineffectual ; but as the Fructification contains more distinct Parts than all the rest of the Plant taken together, and Certitude is found throughout Nature to depend mostly on her minuter Parts, he has since readily admitted this Distinction

In *Gentiana*, the Species cannot any Way be distinguished, if the Flower is not admitted as a specific Character ; but they are easily distinguished by their *Corollæ*, which vary in being *campaniform*, *rotate*, *infundibuliform*, *quinquefid*, *quadrifid*, *octofid*, &c.

In *Hypericum*, the Species are distinguished by the Flowers being *Trigynous* * or *Pentagynous* †.

In *Geranium*, the *African* Species are distinguishable from their *European* Congeners, by the Corolla being irregular, and also by the Connection of their Stamina.

In *Lichen*, the Fructification is distin-

* With three Styles. † With five Styles.

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guishable into *Tuberculum*, a little Knob, which is a Fructification consisting of rough Points collected like a Heap of Dust; *Scutellum*, a small buckler, which is a concave orbiculate Fructification, the Margin of which is elevated on every Side; or *Pelta*, a little Shield, which is a plane Fructification fastened for the most Part to the Margin of the Leaf*.

In *Mosses*, the *Capitulum*, or little Head, is an *Anthera*.

In *Grasses*, *Spicula*, a little Spike, is a partial one; the *Arista*, is tortile, twisted, when it has a twisted Joint in the Middle. *Articulus*, a Joint, is the Part of the *Culmus* that lies between two *Geniculi* or Knots.

A *radiate* compound Flower consists of *Disk* and *Radius*. The *Radius* is composed of irregular *Corollulæ* in the Circumference; and the *Disk* of smaller *Corollulæ*, that are for the most Part regular.

A *decompound* Flower contains within the

* The Terms explained here, and in the following Paragraphs, respect such Circumstances of the Parts of Fructification as concern rather the specific Differences than the classic or generic Ones; and we have therefore followed *Linnaeus* in subjoining them to this Head, notwithstanding that some few of them have been already mentioned and explained in the first Part of this Work.

same

same Calyx lesser Calyces, that are each of them common to many Flowers; as in *Sphaeranthus*.

The *Corolla* is said to be *equal*, when its Parts are equal in Figure, Magnitude, and Proportion; *unequal*, when the Parts answer in Proportion, though not in Magnitude, so that the Flower comes out to be regular; *regular*, when it is equal in respect to the Figure, Magnitude, and Proportion of the Parts; *irregular*, when the Parts of the Limb differ in Figure, Magnitude, or Proportion. *Rictus*, a *Gaping* or *Grinning*, is the Gap or Opening between the two Lips of the Corolla. *Faux*, the *Gorge* or *Gullet*, is the Opening of the Tube of the Corolla. *Palatum*, the *Palate*, is a Gibbosity or bunching out in the *Faux* of the Corolla. *Calcar*, a *Spur*, is a Nectarium extending in a Cone in the hinder Part of the Corolla. The Corolla is *Urceolate*, *Pitcher-shaped*, when it is inflate and gibbous on all Sides, after the Manner of that Vessel; *ciatbyform*, *shaped like a Drinking-Glass*, when it is cylindric, but widening a little towards the upper Part; *conniving*, when there is a Convergency of the Points of the several Lobes of the Limb; or, *lacera*, *rent*, when the Limb is finely cut.

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The *Anthera* is *versatile* * and *incumbent* †, when it is fastened on at its Side; and *Erect*, when it is fastened on at its Base.

The *Pericarpium* is *inflate, puffed*, when it is hollow like a Bladder, and not filled up with Seeds; *prismatic, Prism-shaped*, when it is a linear *Polyedron* with plane Sides; *turbinate, Top-shaped*, when it tapers towards the Base; as in *Pyrus*; *contort, twisted*, when it turns spirally, as in *Ulmaria, Helicteres*, and *Thalictrum*; *acinaciform, Faulchion-shaped*, when the Fruit is compressed like a Blade, one of the longitudinal Angles being obtuse, and the other acute; *echinate, prickly* like an *Echinus* ‡, when it is beset on all Sides with Spines or *Aculei*; *torose* ||, *brawny*, when it is here and there gibbous with brawny Swellings or Prominences; as in *Lycopersicon* and *Phytolacca*.

* Easy to turn.

† Lying flat.

‡ Hedge-Hog.

|| *Torus*, signifies properly the Rise or Swelling out of the strong Muscles of an Arm.

CHAP.

CHAP. XXIII.

Of VARIETIES.

THE collecting of *VARIETIES* under their proper Species, is a Work no less necessary than that of collecting the several Species under their proper Genus. We have observed in the last Chapter, that such Differences as are only incidental to Vegetables, and are not found constant and unchangeable in them, are to be considered as Varieties only. These Varieties are grounded chiefly on the following Circumstances, viz. *Sex, Magnitude, Time of Flowering, Color, Scent, Taste, Virtues and Uses, Duration, Multitude, Pubescence, Leaves, and monstrous Flowers.* Of all which we shall treat in their Order.

The *SEX* of Plants in the Class *Dioecia* affords a Variety of all others the most natural; for the male and female Flowers in this Class being upon different Plants, these last are distinguished by the Fructification though the Species is the same in both. But it must be observed, that this kind of Variety holds only in the Class *Dioecia*; for

in the Genera that belong to any of the hermaphrodite Classes, the same Circumstance, whenever it happens, becomes a specific Distinction: Thus in *Rumex*, which belongs to the Class *Hexandria*, the *Acetosa* and *Acetofella*, being *dioecious* Plants, that is, having their male and female Flowers on distinct Roots, these Species are thereby distinguished from the rest of the Genus.

MAGNITUDE is no specific Difference, but a Variety, being liable to Alteration from the Soil or Climate.

The *TIME* of flowering is a treacherous Mark of a distinct Species; and unless supported by other Distinctions, can only be considered as a Variety.

COLOR is found so changeable in the same Species, that it must be considered as a Variety only.

In *Flowers* the Color is most variable; as in *Tulipa*, *Hepatica*, *Cyanus*, *Campanula*, *Aquilegia*, *Viola*, *Galega*, *Fumaria*, and others, which it would be tedious to enumerate; The most usual Change is from *Blue* or *Red* to *White*. The trifling Distinctions which have been made by *Anthophili* (*Florists*) in some of the Genera we have here instanced, from the Colors of the Corollæ, and to which they have given such pompous Names,

Names *, are held by *Linnaeus* to be below the Notice of the true Botanist ; and he warns him from catching the Infection of such idle Amusement.

Fruits are observed to change their Color as they ripen ; the Pericarpium, when it is a Berry, changing from *Green* to *Red*, and from *Red* to *White* ; and in ripe Fruits, the Color, whether *White*, *Red*, or *Blue*, admits of Variation ; as in *Pyrus*, *Prunus*, *Cerasus*, and others †.

Seeds rarely vary in their Color ; though there are Instances of it in *Papaver*, *Avena*, *Phaseolus*, *Pisum*, and *Faba* ‡.

* Phœbus,	Triumphus Floræ,
Apollo,	Pompa Floræ,
Astræa,	Splendor Asiæ,
Dædalus,	Corona Europæ
Cupido,	Gemma Hollandiæ.

† *Solanum Guineense* fructu nigerrimo (B.)

Solanum annuum baccis luteis (Dillen.)

Solanum Judaicum baccis aurantiis (Dillen.)

Rubus vulgaris major fructu albo (Raj.)

Ribes vulgare acidum albas baccas ferens (F. B.)

‡ *Papaver hortense* nigro semine (C. B.)

Papaver hortense semine albo (C. B.)

Avena vulgaris & alba (C. B.)

Avena nigra (C. B.)

Phaseolus vulgaris fructu violaceo (Tournef.)

Phaseolus vulgaris fructu ex rubro et nigro variegato (Tourn.)

Phaseolus fructu albo venis nigris et lituris distincto (Tourn.)

Pisum maximum fructu nigra linea maculato (H. R. P.)

Pisum hortense flore fructuque variegato (C. B.)

Faba ex rubicundo colore purpurascens.

Roots

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Roots are also little subject to Alteration in Color ; yet a Variation is observed in the Roots of *Daucus* and *Raphanus* *

Leaves are rarely found to quit their Green, but they are colored in *Amaranthus* ; and frequently become spotted ; as in *Perficaria*, *Ranunculus*, *Orchis*, *Hieracium*, and *Lactuca* †.

The whole *Plant* is often found to vary in its Color ; as in *Eryngium*, *Abrotanum*, *Artemisia*, *Atriplex*, *Amaranthus*, *Portulaca*, and *Lactuca* ‡.

* *Daucus sativus radice alba* (Tourn.)

Daucus sativus radice lutea (Tourn.)

Daucus sativus radice aurantii coloris (Tourn.)

Daucus sativus radice atro-rubente (Tourn.)

Raphanus niger (C. B.)

† *Perficaria cum maculis ferrum equinum referentibus* (Tourn.)

Ranunculus hederaceus atra macula notatus.

Orchis palmata palustris maculata (C. B.)

Hieracium Alpinum maculatum (Tourn.)

Lactuca maculosa (C. B.)

‡ *Eryngium latifolium planum caule ex viridi pallescente flore albo* (Tourn.)

Abrotanum cauliculis albicantibus (Tourn.)

Artemisia vulgaris major caule ex viridi albicante (Tourn.)

Atriplex hortensis rubra (C. B.)

Amaranthus sylvestris maximus Novæ Angliæ spicis purpureis (Tourn.)

Portulaca sativa foliis flavis (Moris.)

Lactuca capitata rubra B.

SCENT

SCENT in Plants is, of all other Circumstances, the least to be depended on; and therefore all Species grounded on a Distinction in the *Scent* only, are to be rejected, and referred to Varieties.

TASTE in Plants is a Circumstance variable from Soil or Culture; and not to be depended upon as a real Difference. The Distinctions of Gardeners in Fruit of the same Species, is considered by *Linnaeus* as a Variety too minute even to enter the Province of Botany; and therefore the various Names *, which have been given to these Distinctions, are to be neglected as impertinent in this Science; though, for the Purposes of Gardening, they have their Use.

The *VIRTUES* and *USES* of Plants furnish no specific Difference; and the Distinctions therefore of physical Writers are not always to be depended on.

The *DURATION* of Plants is no sure Mark of distinct Species, being often owing rather to the Place than to the Nature of the Plant. In warm Regions, Plants that

* *Poma Paradisiaca*
Praefomila
Rubelliana
Borstorpbiana
Appiana
Melimela

Pyra Falerna
Favonia
Boni Christiana
Crustamina
Picena
Libraria.

are

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are *annual* with us will become *perennial* or *arboreſcent* ; as is found in *Tropæolum*, *Beta*, *Majorana*, *Malva arborea*, &c. And on the contrary, cold Regions will occasion *perennial* Plants to become *annual* ; as is obſerved in *Ricinus*, *Mirabilis*, &c.

MULTITUDE or Quantity, is an accidental Circumſtance in Plants, and cannot conclude any Thing, whether the Increate be of the *Plant* itſelf, or of its *Roots*, *Stems*, *Leaves*, or *Fruſtification*.

PUBESCENCE is an uncertain Mark ; as by Culture and Change of Soil, Plants are ſubject to loſe as well their *Spines* as their *Hair* or *Down*.

LEAVES, though they for the moſt part furniſh moſt elegant ſpecific Differences, as has been obſerved in the laſt Chapter, are yet ſubject to Luxuriation in the ſame Species, which muſt be carefully diſtinguiſhed. This may reſpect their *Oppoſition* and *Compoſition*, and alſo their being *criſp* (*curled*) or *bullate* (*bladdery*.)

In reſpect to *Oppoſition*, oppoſite Leaves will ſometimes become *tern*, *quatern*, or *quine*, growing by *Threes*, *Fours*, or *Fives* ; and then the Stem alſo from *quadrangular*,
ſquare,

square, will become *polygonous*, of many Sides *.

In respect to *Composition*, *digitate* Leaves will frequently gain an Addition of one or more *Folioles* †.

Crisp, *curled* Leaves, are a very frequent Variety. In *Tanacetum*, *Mentha*, *Ocymum*, and *Matricaria*, which are scented Plants, there is this Singularity observable, that when the Leaves are curled, the Scent is heightened by the *Crispature* ‡.

Bullate, *bladdery* Leaves are generally produced from such as are *rugose*, *wrinkled*; and this is owing to the Increase of the Substance of the Leaf within its Vessels which occasions it to swell and rise: In the *Saponaria Concava Anglicana*, a *bullate*

* *Lyfimachia lutea major foliis ternis* (Tourn.)

Lyfimachia lutea major foliis quaternis (Tourn.)

Lyfimachia lutea major foliis quinis (Tourn.)

Anagallis cærulea foliis binis ternisve ex adverso nascentibus (Raj.)

Anagallis Phænicea foliis amplioribus ex adverso quaternis (Tourn.)

Salicaria trifolia caule Hexagono (Tourn.)

† *Trifolium quadrifolium hortense album* (C. B.)

‡ *Malva crispa* (J. B.)

Mentha crispa Danica (Park.)

Tanacetum foliis crispis (C. B.)

Matricaria crispa.

Ocymum latifolium maculatum vel crispum (C. B.)

Leaf

Leaf is produced in a singular Manner from the Defect of Wrinkles ; for here the Margin of the Leaf contracting itself, the Leaves become hollow like a Spoon *.

Plants are sometimes found to vary from *broad-leaved* to *narrow-leaved* ; but this Variation is less frequent †.

MONSTROUS Flowers, such as the *Multiplicate*, *Full*, or *Proliferous*, derive their Origin from natural ones, and therefore are to be considered only as a Variety from *Luxuriance*.

Upon the whole, the *Change of Soil* is found to have a great Effect on the Nature of Plants ; and to this many of the Varieties above-mentioned must be imputed ; as in *Buxus*, *Xanthium*, *Acanthus*, *Cinara*, *Brunella*, *Myosotis*, *Crista Galli*, and *Cerin-*

* *Ocimum foliis bullatis* (C. B.)

Brassica undulata (Renealm.)

Lactuca capitata foliis magis rugosis (B.)

Lactuca capitata major foliis rugosis et contortis (B.)

Lactuca capitata omnium maxima verrucosa (B.)

† *Heracleum hirsutum foliis angustioribus* (C. B.)

Lycopus foliis in profundas lacinias incisus (Tourn.)

Brassica angusto apii folio (C. B.)

Veronica Austriaca foliis tenuissime laciniatis (Tourn.)

Sambucus laciniato folio (C. B.)

Sonchus asper laciniatus (C. B.)

Valeriana Sylvestris foliis tenuissime divisis (C. B.)

the;

the *; which would all return to their old Conditions if the Soil were changed again. And in like Manner the Improvements which are made by Culture in the Plants cultivated for Sale, as in *Vitis*, *Malum*, *Pyrus*, *Amygdalus Persica*, *Asparagus*, *Cerasus*; and in Grain, Pulse, and Fruit of all Kinds are not to be esteemed as lasting: for all these, if left to themselves in a poor Soil, would run off again, and resume the Qualities they had when they grew wild.

The Soil has some Effect also upon Leaves; for though it is less common for the Leaves to differ on the same Plant, as they do in some Species of *Lepidium*, *Tithymalus*, *Rudbeckia*, and *Hibiscus*†; yet it is observed, that

* *Buxus arborescens* (C. B.) *Buxus humilis* (Dod.)
Xanthium (Dod.) *Xanthium Canadense majus* (Tourn.)
Acanthus mollis (C. B.) *Acanthus aculeatus* (C. B.)
Cinara aculeata (C. B.) *Cinara non aculeata* (C. B.)
Brunella (Dod.) *Brunella cæruleo magno flore* (C. B.)
Myosotis foliis hirsutis (H. C.) et *foliis glabris* (H. C.)
Crista galli fœmina (J. B.) et *mas.* (J. B.)
Cerinthe flore ex rubro purpurascente (C. B.) et *flavo flore asperior* (C. B.)

† *Tithymalus heterophyllus* (Plum. Pluk. Alm. 112. f 6.)
Rudbeckia foliis inferioribus trilobis, superioribus indivisis.
 (Hort. Upsal.)
Hibiscus foliis inferioribus integris, superioribus trilobis
 (Hort. Cliff.)
Lepidium foliis caulinis pinnato-multifidis, rameis cordatis amplexicaulibus integris (H. C.)

watry

watry Soils are apt to produce a Division in the lower Leaves of the Plant, and even to render capillary such as are produced under the Water; as in some Species of *Ranunculus* and *Sisymbrium* *; and also in *Cicuta*, *Sium*, *Phellandrium*, *Oenanthe*, &c. And on the contrary, that mountainous Plants usually have their upper Leaves more divided, and their lower ones more entire; as in *Pimpinella*, *Petroselinum*, *Anisum*, and *Coriandrum*.

Varieties may generally be explained and reduced under their proper Species with Ease, by conferring the variable Marks of the Variety with the natural Plant: But there are some few which are attended with Difficulty, and require Judgment and Experience; as in some Species of *Helleborus* †, *Gentiana* ‡, *Fumaria* ||, *Valeriana* §, *Scorpiurus*,

* *Ranunculus aquaticus folio rotundo et capillaceo* (G. B.)
Sisymbrium foliis simplicibus dentatis serratis (H. C.)

† *Helleborus aconiti folio, flore globofo croceo* (Amm. ruth. 101.) *Trollius humilis flore patula* (Buxb. cent. 1. p. 15. l. 22.) *Varietas Hellebori Trollii* (Fl. Succ. 475.) *Nectariis longitudine corollæ.*

‡ *Gentiana corolla hypocrateri formi. Tubo villis clauso, calycis foliis alternis majoribus* (Fl. Lap. 94.) *Varietas gentianæ fauce barbata* (Fl. Succ. 203.) *flore quadrifido et calycinis laciniis alternis duplo latioribus.*

|| *Fumaria bulbosa radice cava et non cava major et minor.*

§ *Valeriana arvensis præcox humilis, semine compresso* (T.)
Valeriana

*rus**, and *Medicago*†. In respect to the *Fumaria* in question, it is known to be one Species only, by the Minuteness of its Perianthium, the Scale of its Bud, the Structure of its Leaves, the Situation of the Branch, the Place of the Bractea, the Corolla, Siliqua, Seeds, and Stigma; but it varies in the Division of its Bracteæ, and in the Root being more or less hollow. And that the *Valerians* here spoken of are all of the same Species, though they differ so greatly in the Fruit, and often in having their Leaves more cut, is also proved from their dichotomous Stems and annual Roots, and from the Structure of their Leaves, Corollæ, and Seeds. Nor should the Species of *Scorpiurus* and *Medicago* here instanced be either

Valeriana arvensis præcox humilis, foliis serratis (T.)
Valeriana arvensis serotina altior, semine turgidior (Mor.)
Valeriana semine umbilicato nudo rotundo (Moris.)
Valeriana semine umbilicato nudo oblongo (Moris.)
Valerianella semine umbilicato hirsuto majore (Moris.)
Valerianella semine umbilicato hirsuto minore (Moris.)
Valerianella Cretica, fructu vesicario (Tourn. Cor.)
Valerianella semine stellato (C. B.)

* *Scorpioides siliqua campoides hispida* (J. B.)
Scorpioides siliqua cochleata & striata Ulissiponensis (T.)
Scorpioides Bupleuri folio siliquis levibus (Park.)
Scorpioides siliqua crassa. (Boëlii Ger.)

† *Medicago leguminibus cochleatis, stipulis dentatis, caule diffuso* (H. C.)

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of them parted, although there is so remarkable a Diversity in the Fruit of the Individuals. In the *Medicago* * in particular, the Forms of the real Snails, which Nature has imitated in these Plants, are scarce more diversified than is the Fruit of this mimic Species; so that the Botanist, who is studious of Varieties, would hardly find any End to his Labour, of pursuing Nature through the various Shapes which she has so wantonly adopted.

The whole Order of the *Fungi*, to the Scandal of the Science, is still a Chaos, the Botanists not being yet able in these to decide with Certainty what is a Species, and what a Variety.

* <i>Medicago</i> <i>scutellata</i>	<i>Medicago</i> <i>hirsuta</i>
———— <i>orbiculata</i>	———— <i>lupulina</i>
———— <i>echinata</i>	———— <i>spinosa</i>
———— <i>turbinata</i>	———— <i>rugosa</i>
———— <i>coronata</i>	———— <i>polycarpus</i>
———— <i>doliata</i>	———— <i>dicarpus</i>
———— <i>ciliaris</i>	———— <i>Arabica</i>
———— <i>tornata</i>	———— <i>Cretica.</i>

Explanation

*Explanation of the TABLES, with some
Hints concerning the Manner of studying
the Science of Botany by the Help of this
Book.*

THE first Table is divided into three Columns; the first of which contains the Names of the Genera admitted by *Linnaeus*, alphabetically disposed; the second, the *English* Names, where there are any that have been commonly received; and the last, the Names of the Classes and Orders, to which the Genera respectively belong.

The second Table is likewise divided into three Columns; the first of which contains the generic Names that are now out of Use, alphabetically disposed; the second, the *English* Names that have been given to them; and the third, the Names of the *Linnaean* Genera, under which they are respectively to be sought in the first Table.

By the Help of these Tables, the Reader will be enabled to find the Class and Order of any Plant he may propose to examine, after he has informed himself of its botanic Name: For if the Name given him be not the same admitted by the Author we have

followed, and consequently not to be met with in the first Table, he will probably find it in the second, which will refer him to the first.

By these Tables, properly used, in Conjunction with the Book, itself, it is conceived, that the Reader may arrive not only at an Acquaintance with the Principles of the Science, but even at a practical Knowledge of the Distinctions of Vegetables, much sooner than he could by reading the Descriptions, and inspecting the Figures given by old Writers, whose Collections are either without Method, or disposed according to such Systems as have been exploded; for by what we have laid before him, he will be enabled to consult the Productions of Nature, and compare them with what is delivered in the Book; or, in other Words, to mix the Practice with the Theory; without which the Study of this Science would be dry and tasteless, and the progress made in it of little Advantage. As we cannot but recommend this useful Amusement to the Reader in the strongest Manner, so we shall attempt to assist him farther, by a few Hints for the methodizing of his Endeavours.

The first thing he should aim at is, to get a thorough Knowledge of the Distinctions

tions of the twenty-four Classes. In order to this, the first Part of this Book should be previously perused, as the Parts of Fructification are therein explained; without which the Classes could not be understood. Then let him gather some of the ordinary Flowers, such as the Blossoms of the Fruit-garden or Kitchen-ground, or the ornamental Flowers of his Borders, and bring them by turns into his Closet for Examination, chusing first the larger Kinds, and such as naturally expand and discover the Stamina and Pistillum; and when he has accustomed himself to know the Parts of Fructification in these easier Kinds, he may then try such as require being stript of their Covers, or dissected with a Penknife, to discover their inner Parts, or whose Minuteness requires the Assistance of a magnifying Glass for the observing them properly. The double Flowers should be avoided, as being unnatural. Having fixed on the Flower he would first examine, he will, by the Help of the Tables, be informed of the Class it belongs to; then turning to the Chapter of the second Part of the Book, which treats of that Class, let him carefully read over the Character there given of the Class, and compare his Flower therewith; a frequent

Practice of this will soon make him retain the Names of the Classes, and their several Distinctions.

When he has arrived thus far, he may begin to try his Strength, by deciding always first himself upon the Class, before he turns to the Book ; and he will be now qualified to begin the Study of the Orders ; which he may pursue after the same Method as he did the Classes, finding the Orders out first by the Tables, reading their Characters, and comparing them with the Flower, till he has gained a clear Notion of their several Distinctions ; after which he should in like manner attempt to declare the Order himself.

The Subdivisions also of the Orders, tho' they are not made Part of the systematic Distribution of Vegetables, are yet well worth his Attention ; as in some of the extensive Orders it would be more troublesome to detect the Genus of any Flower, if the Genera contained in the Order were not parcelled out under such convenient Distinctions. By these Divisions, the Reader will be led to decide on any Plant within a very few Genera. And here we must take our Leave of him, and refer the rest of the Work to his own Industry ; for though we have laid
down

OF THE TABLES. 26

down the Principles of both generic and specific Distinctions, the former in the second, and the latter in the third Part of this Work, yet it was impossible to include even the Characters of the Genera in a Work of this Compass, much less to have entered upon an Enumeration or Description of the several Species,



T A B L E I.

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Abrus		Diadelphia, Decandria
Acalypha		Monoeccia, Monadelphia
Acanthus	Bears Breech	Didynamia, Angiosper.
Acæna		Tetrandria, Monogynia
Acer	Maple	Polygamia, Monoecia
Achillea	Milfoil	Syngenesia, Polyg. sup.
Achras	Sapota	Hexandria, Monogynia
Achyranthes		Pentandria, Monogynia
Acnida		Dioecia, Pentandria
Aconitum	Wolfsbane	Polyandria, Trigynia
Acorus	Sweet Rush	Hexandria, Monogynia
Acrostichum	Forked Fern	Cryptogamia, Filices
Actæa	Herb Christopher	Polyandria, Monogynia
Adansonia	Æthiopian Sourgourd	Monadelphia, Polyandr.
Adelia		Dioecia, Monadelphia
Adenantha	Bastard Flower-fence	Decandria, Monogynia
Adiantum	Maiden-Hair	Cryptogamia, Filices
Adonis	Bird's Eye	Polyandria, Polygynia
Adoxa	Tuberous Moschatel, or hollow Root	Octandria, Tetragynia
Ægilops		Polygamia, Monoecia
Ægiphila		Tetrandria, Monogynia
Ægopodium	Herb Gerard, Goutwort, or wild Angelica	Pentandria, Digynia
Æschynomene	Bastard sensitive Plant	Diadelphia, Decandria
Æsculus	Horse Chestnut	Heptandria, Monogynia
Æthusa	Lesser Hemlock, or Fools Parsley	Pentandria, Digynia
Agaricus	Agaric	Cryptogamia, Fungi
Agave	American Aloë	Hexandria, Monogynia
Ageratum	Bastard Hemp Agrimony	Syngenesia, Polyg. æqu.
Agrimonia	Agrimony	Dodecandria, Digynia
Agrostemma	Campion, or wild Lichnis	Decandria, Pentagynia
Agrostis	Bent Grass	Triandria, Digynia
Agyneja		Monoeccia, Gynandria
Aira	Hair Grass	Triandria, Digynia
Ajuga.	Bugle	Didynamia, Gymnosperm.
		Aizoon

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Aizoon		Icosandria, Pentagynia
Albuca		Hexandria, Monogynia
Alcea	Hollyhock, or Rose-mallow	Monadelphia, Polyandr.
Alchemilla	Ladies Mantle	Tetrandria, Monogynia
Aldrovanda		Pentandria, Monogynia
Aletris	Bastard Aloë	Hexandria, Monogynia
Alisma	Water Plantain	Hexandria, Polygynia
Allamanda		Pentandria, Monogynia
Allionia		Tetrandria, Monogynia
Allium	Garlick	Hexandria, Monogynia
Allophyllus		Octandria, Monogynia
Aicē		Hexandria Monogynia
Alopecurus	Foxtail Grass	Triandria, Digynia
Alpinia		Monandria, Monogynia
Alfne	Chickweed	Pentandria, Monogynia
Alstroemeria		Hexandria Monogynia
Althæa	Marshmallow	Monadelphia, Polyandr.
Alyssum	Madwort	Tetradynamia, Siliculof.
Amaranthus	Amaranth, or Flower-gentle	Monoecia, Pentandria
Amaryllis	Lily Daffodil	Hexandria, Monogynia
Ambrosia		Monoecia, Pentandria
Ambrosina		Gynandria, Polyandria
Amellus		Syngenesia, Polyg. super.
Amethystea		Diandria, Monogynia
Ammannia		Tetrandria, Monogynia
Ammi	Bishop's Weed	Pentandria, Monogynia
Amomum	Ginger	Monandria, Monogynia
Amorpha	Bastard Indigo	Diadelphia, Decandria
Amygdalus	Almond, or Peach	Icosandria, Monogynia
Amyris		Octandria, Monogynia
Anabasis	Berry-bearing Grass-wort	Pentandria, Digynia
Anacardium	Cashew-nut	Enneandria, Monogynia
Anacyclus		Syngenes. Polyg. superfl.
Anagallis	Pimpernel	Pentandria, Monogynia
Anagyris	Stinking Bean Trefoil	Decandria, Monogynia
Anastatica	Rose of Jericho	Tetradynamia, Siliculosa
Anchusa	Bugloss	Pentandria, Monogynia
Andrachne	Bastard Orpine	Monoecia, Gynandria
Andromeda	Marsh Cistus	Decandria, Monogynia
Andropogon		Polygamia, Monoecia
Androsæc		Pentandria, Monogynia

An-

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Andryala	Downy Sow-thistle	Syngenesia, Polyg. æqu.
Anemone	Wind Flower	Polyandria, Polygynia
Anethum	Dill	Pentandria, Digynia
Angelica		Pentandria, Digynia
Anguria		Monoecia, Diandria
Annona	Custard Apple	Polyandria, Polygynia
Anthemis	Chamomile	Syngenesia, Polyg. super.
Anthericum	Spider-wort	Hexandria, Monogynia
Anthoceros		Cryptogamia, Algæ
Anthospermum	Amber Tree	Polygamia, Dioecia
Anthoxanthum	Vernal Grass	Diandria, Digynia
Antholyza		Triandria, Monogynia
Anthyllis	Kidney Vetch, or Lady's Finger	Diadelphia, Decandria
Antichorus		Ostendria, Monogynia
Antidesma		Dioecia, Pentandria
Antirrhinum	Snap-Dragon, or Calves Snout	Didynamia, Angiosper.
Aphanes	Parsley-piert	Tetrandria, Digynia
Aphyllanthes		Hexandria, Monogynia
Apium	Parsley	Pentandria, Digynia
Apluda		Polygamia, Monoecia
Apocynum	Dogs-bane	Pentandria, Digynia
Aquartia		Tetrandria, Monogynia
Aquilegia	Columbine	Polyandria, Pentagynia
Aquilicia		Pentandria, Monogynia
Arabis	Bastard Tower Mustard	Tetradynamia, Siliquosa
Arachis	Ground Nut	Diadelphia, Decandria
Aralia	Berry-bearing Angelica	Pentandria, Digynia
Arbutus	Strawberry-tree	Decandria, Monogynia
Arctium	Burdock	Syngenesia, Polyg. æqu.
Arctopus		Polygamia, Dioecia
Arctotis		Syngenesia, Polyg. Necessaria
Arduina	Bastard Lycium	Pentandria, Monogynia
Areca	Areca Nut	Appendix, Palmæ
Arenaria	Sea Chickweed	Decandria, Trigynia
Arethusa		Gynandria, Diandria
Aretia		Pentandria, Monogynia
Argemone	Prickly Poppy	Polyandria, Monogynia
Aristida		Triandria, Digynia
Aristolochia	Birthwort	Gynandria, Hexandria

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Arnica		Syngenesia, Polyg. superflua
Artedia		Pentandria, Digynia
Artemesia	Mugwort	Syngenes. Polyg. superfl.
Arum	Wake Robin, or Cuckow Pint	Gynandria, Polyandria.
Arundo	Reed	Triandria, Digynia
Asarum	Asarabacca	Dodecandria, Monogyn.
Asclepias	Swallow-wort	Pentandria, Digynia
Ascyrum	St. Peter's-wort	Polyadelphia, Polyandr.
Aspalathus	African Broom	Diadelphia, Decandria
Asparagus	Asparagus, or Sperage	Hexandria, Monogynia
Asperugo	Wild Bugloss, or Goose Grass	Pentandria, Monogynia
Asperula	Woodroof	Tetrandria, Monogynia
Asphodelus	Asphodel, or King's Spear	Hexandria, Monogynia
Asplenium	Spleen-wort, or Milt- waste	Cryptogamia, Filices
After	Star-wort	Syngenes. Polyg. superfl.
Astragalus	Liquorice Vetch, or Milk Vetch	Diadelphia, Decandria
Astrantia	Black Masterwort	Pentandria, Digynia
Astronium		Dioecia, Pentandria
Athamanta	Spiguel	Pentandria, Digynia
Athanasia		Syngenesia, Polyg. æqu.
Atractylis	Distaff Thistle	Syngenes. Polyg. æqua.
Atragene		Polyandria, Polygynia
Atraphaxis		Hexandria, Digynia
Atriplex	Orach	Polygamia, Dioecia
Atropa	Deadly Nightshade	Pentandria, Monogynia
Avena	Oats	Triandria, Digynia
Averrhoa		Decandria, Pentagynia
Avicennia		Didynamia, Angiosper.
Axyris		Monoecia, Triandria
Ayenia		Gynandria, Pentandria
Azalea	American upright Ho- ney-suckle	Pentandria, Monogynia
B		
Baccharis	Plowman's Spikenard	Syngenes. Polyg. super.
Baeckea		Octandria, Monogynia
Ballota	Black Horehound	Didynamia, Gymnosper.
Baltimora		Syngenes. Polyg. Neces.
Banisteria		Decandria, Trigynia

Bar-

T A B L E I.

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GENERA	ENGLISH NAMES.	CLASSES and ORDERS.
Barleria		Didynamia, Angiosper.
Bartia		Didynamia, Angiosper.
Basella	Malabar Nightshade	Pentandria, Trigynia
Bassia		Dodecandria, Monogyn.
Batis		Dioecia, Tetrandria
Bauhinia	Mountain Ebony	Decandria, Monogynia
Befaria		Dodecandria, Monogyn.
Begonia		Monoecia, Polyandria
Bellium		Syngenes. Polyg. super.
Bellis	Daify	Syngenes. Polyg. super.
Bellonia		Pentandria, Monogynia
Berberis	Berberry, or Piperidge-Bush	Hexandria, Monogynia
Bergera		Decandria, Monogynia
Bergia		Decandria, Pentagynia
Besleria		Didynamia, Angiosper.
Beta	Beet	Pentandria, Digynia
Betonica	Betony	Didynamia, Gymnosper.
Betula	Birch	Monoecia, Triandria
Bidens	Water Hemp Agrimony	Syngenes. Polyg. equal.
Bignonia	Trumpet Flower	Didynamia, Angiosper.
Biscutella	Buckler Mustard	Tetradynamia, Siliculosa
Biserrula		Diadelphia, Decandria
Bixa	Anotta	Polyandria, Monogynia
Blakea		Dodecandria, Monogyn.
Blasia		Cryptogamia, Algæ
Blæria		Tetrandria, Monogynia
Blechnum		Cryptogamia, Filices
Blitum	Strawberry-Spinage, or Blite	Monandria, Digynia
Bobartia		Triandria, Digynia
Bocconia		Dodecandria, Monogyn.
Boerhaavia	American Hogweed	Monandria, Monogynia
Boletus		Cryptogamia, Fungi
Bombax	Silk Cotton Tree	Monadelphia, Polyandr.
Bontia		Didynamia, Angiosper.
Borassus		Appendix, Palma
Borbonia		Diadelphia, Decandria
Borago	Borrage	Pentandria, Monogynia
Bosea	Yerva-mora, or Golden Rod Tree	Pentandria, Digynia
Brabejum	African Almond	Polygamia, Monoecia
Brassica	Cabbage	Tetradynamia, Siliculosa
Briza	Quaking-Grass	Triandria, Digynia

Bro-

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS
Bromelia	Ananas, or Pine Apple	Hexandria, Monogynia
Bromus	Brome Grass	Triandria, Digynia
Brossæa		Appendix, Plantæ
Browallia		Didynamia, Angiosper.
Brownæa		Monadelphia, Enneand.
Brunia		Pentandria, Monogynia
Brunsfelsia		Pentandria, Monogynia
Bryonia	Bryony	Monoecia, Syngenesia
Bryum		Cryptogamia, Musci
Bubon	Macedonian Parsley	Pentandria, Digynia
Bucida		Decandria, Monogynia
Buchnera		Didynamia, Angiosper.
Buddleja		Tetrandria, Monogynia
Bufonia		Tetrandria, Digynia
Bulbocodium		Hexandria, Monogynia
Bunias		Tetradynamia, Siliquosa
Bunium	Pig-nut, or Earth-nut	Pentandria, Digynia
Buphthalmum	Ox-eye	Syngenes. Polyg. superfl.
Bupleurum	Hare's ear	Pentandria, Digynia
Burmanna		Hexandria, Monogynia
Bursera		Hexandria, Monogynia
Butomus	Flowering Rush, or Water Gladiolus	Enneandria, Hexagynia
Buxbaumia		Cryptogamia, Musci
Buxus	Box Tree	Monoecia, Tetrandria
Byssus		Cryptogamia, Algæ
Byttneria		Pentandria, Monogynia

C

Cacalia	Alpine Colt's Foot	Syngenesia, Polyg. æqu.
Cactus	Melon Thistle	Icosandria, Monogynia
Cachrys		Pentandria, Digynia
Cæsalpinia	Brasiletto	Decandria, Monogynia
Calea		Syngenes. Polyg. æqual.
Calendula	Marygold	Syngenes. Polyg. neces.
Calamus		Hexandria, Monogynia
Calceolaria		Diandria, Monogynia
Calycanthus	Virginian All-spice	Icosandria, Polygynia
Calla	African Arum	Gynandria, Polyandria
Callicarpa	Johnsonia	Tetrandria, Monogynia
Calligonum		Polyandria, Digynia
Callisia		Triandria, Monogynia

Cal-

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GENERA	ENGLISH NAMES.	CLASSES and ORDERS.
Callitriche	Star-headed Water-Chickweed	Monandria, Digynia
Calophyllum		Polyandria, Monogynia
Caltha	Marsh Marygold	Polyandria, Polygynia
Cambogia		Polyandria, Monogynia
Camellia		Monadelphica, Polyand.
Cameraria		Pentandria, Monogynia
Campanula	Bell-Flower	Pentandria, Monogynia
Camocladia		Triandria, Monogynia
Camphorosma		Tetrandria, Monogynia
Canarina		Hexandria, Monogynia
Canarium		Dioecia, Pentandria
Canna	Indian Flowering Reed	Monandria, Monogynia
Cannabis	Hemp	Dioecia, Pentandria
Capparis	Caper Bush	Polyandria, Monogynia
Capraria		Didynamia, Angiosper.
Capficum	Guinea Pepper	Pentandria, Monogynia
Capura		Hexandria, Monogynia
Cardamine	Lady's Smock	Tetradynamia, Siliquosa
Cardiospermum	Heart Pea	Octandria, Trigynia
Carduus	Thistle	Syngenes. Polyg. æqualis
Carex		Monoecia, Triandria
Carica	Papaw	Dioecia, Decandria
Carissa		Pentandria, Monogynia
Carlina	Carline Thistle	Syngenes. Polyg. æqua.
Carpesium		Syngenesia, Polyg. super.
Carpinus	Hornbeam	Monoecia, Polyandria
Carthamus	Bastard Saffron	Syngenes. Polyg. æqua.
Carum	Carui, or Carraway	Pentandria, Digynia
Caryocar		Polyandria, Tetragynia
Caryophyllus	Clove Tree	Polyandria, Monogynia
Caryota		Appendix, Palmæ
Cassia	Wild Senna	Decandria, Monogynia
Cassine	Hottentot Cherry	Pentandria, Trigynia
Cassya		Enneandria, Monogynia
Catananche	Candy Lion's Foot	Syngenesia, Polyg. æqu.
Catesbæa	Lily Thorn	Tetrandria, Monogynia
Caturus		Dioecia, Pentandria
Caucalis	Bastard Parsley	Pentandria, Digynia
Ceanothus	New Jersey Tea	Pentandria, Monogynia
Cecropia		Dioecia, Diandria
Cedrela		Pentandria, Monogynia
Celastrus	Staff Tree	Pentandria, Monogynia

Celo.

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Celofia	Cock's Comb	Pentandria, Monogynia
Celfia		Didynamia, Angiosper.
Celtis	Nettle Tree	Polygamia, Monoecia
Cenchrus		Polygamia, Monoecia
Centaurea	Centaury	Syngenesia, Polyg. frutr.
Centella		Monoecia, Tetrandria
Centunculus		Tetrandria, Monogynia
Cephalanthus	Button Wood	Tetrandria, Monogynia
Cerastium	Mouse-ear Chickweed	Decandria, Pentagynia
Ceratocarpus		Monoecia, Monandria
Ceratonia	Carob Tree, or St. John's Bread	Polygamia, Polyoecia,
Ceratophyl- lum	Horned Pond Weed	Monoecia, Polyandria
Cerbera		Pentandria, Monogynia
Cercis	Judas Tree	Decandria, Monogynia
Cerinthæ	Honey-wort	Pentandria, Monogynia
Ceropegia		Pentandria, Monogynia
Cestrum	Bastard Jasmine	Pentandria, Monogynia
Chærophyl- lum	Wild Chervil	Pentandria, Digynia
Chalcas		Decandria, Monogynia
Chamærops	Dwarf Palm, or Palmetto	Appendix, Palmæ
Chara		Monoecia, Monandria
Cheiranthus	Stock July Flower	Tetradynamia, Siliquosa
Chelidonium	Celandine	Polyandria, Monogynia
Chelone		Didynamia, Angiosper.
Chenopodium	Goose Foot, or Wild Orach	Pentandria, Digynia
Cherleria		Decandria, Trigynia
Chiococca		Pentandria, Monogynia
Chionanthus	Snow-drop Tree, or Fringe Tree	Diandria, Monogynia
Chironia		Pentandria, Monogynia
Chlora		Ostandria, Monogynia
Chondrilla	Gum Succory	Syngenes. Polyg. æqualis
Chrysanthemum	Corn Marigold	Syngenesia, Polyg. superflua
Chrysitrix		Polygamia, Dioecia
Chrysobalanus	Cocoa Plum	Icosandria, Monogynia
Chrysocoma	Goldy Locks	Syngenes. Polyg. æqualis
Chrysogonum		Syngenes. Polyg. æqualis
Chrysophyl- lum	Star Apple	Pentandria Monogynia

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GENERA.	ENGLISH NAMES:	CLASSES and ORDERS.
Chrysosplenium	Golden Saxifrage	Decandria, Digynia
Cicca		Monoecia, Tetrandria
Cicer	Chich Peas	Diadelphia, Decandria
Cichorium	Succory, or Endive	Syngenesia, Polyg. æqua.
Cicuta	Water Hemlock	Pentandria, Digynia
Cimicifuga		Polyandria, Tetragynia
Cinchona		Pentandria, Monogynia
Cinna		Monandria, Digynia
Cineraria	Sky-Flower	Syngenesia, Polyg. super.
Circæa	Enchanter's Nightshade	Diandria, Monogynia
Cissampelos		Dioecia, Monadelphia
Cissus		Tetrandria, Monogynia
Cistus	Rock Rose	Polyandria, Monogynia
Citharexylon	Fiddle-wood	Didynamia, Angiosper.
Citrus	Citron	Polyadelphia, Icosandria
Clathrus		Cryptogamia, Fungi
Clavaria		Cryptogamia, Fungi
Claytonia		Pentandria, Monogynia
Clematis	Virgin's Bower	Polyandria, Polygynia
Cleome	Baltard Mustard	Tetradynamia, Siliculosa
Cleonia		Didynamia, Gymnosper.
Clerodendrum		Didynamia, Angiosper.
Clibadium		Monoecia, Pentandria
Clethra		Decandria, Monogynia
Cliffortia		Dioecia, Polyandria
Clinopodium	Field Basil	Didynamia, Gymnosper.
Clitoria		Diadelphia, Decandria
Clusia	Balsam Tree	Polygamia, Monoecia
Clusia		Dioecia, Gynandria
Clypeola	Treacle Mustard	Tetradynamia, Siliculosa
Cneoram	Widow-wail	Triandria, Monogynia
Cnicus	Blessed Thistle	Syngenesia, Polyg. æqua.
Cochlearia	Scurvy-Grafs, or Spoon-wort	Tetradynamia, Siliculosa
Cocos	Cocoa-Nut	Palmae
Coccoloba		Octandria, Trigynia
Codon		Decandria, Monogynia
Coffea	Coffee-Tree	Pentandria, Monogynia
Coix	Job's Tears	Monoecia, Triandria
Colchicum	Meadow Saffron	Hexandria, Trigynia
Coldenia		Tetrandria, Tetragynia
Collinsonia		Diandria, Monogynia
Columnnea		Didynamia, Angiosper.

T

Colu-

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Colutea	Bladder Senna	Diadelphia, Decandria
Comarum	Marsh Cinquefoil	Icosandria, Polygynia
Combretum		Octandria, Monogynia
Cometes		Tetrandria, Monogynia
Commelina		Triandria, Monogynia
Conferva		Cryptogamia, Algæ
Conium	Hemlock	Pentandria, Digynia
Connarus		Monadelphia, Decandria
Conocarpus	Button-Tree	Pentandria, Monogynia
Convallaria	Lily of the Valley	Hexandria, Monogynia
Convolvulus	Bind-weed	Pentandria, Monogynia
Conyza	Flea bane	Syngenesia, Polyg. frustr.
Copaifera		Decandria, Monogynia
Corchorus	Jew's Mallow	Polyandria, Monogynia
Cordia	Sibetan	Pentandria, Monogynia
Coreopsis	Tickseeded Sunflower	Syngenesia Polyg. frustr.
Coriandrum	Coriander	Pentandria, Digynia
Coriaria	Myrtle-leaved Sumach	Dioecia, Decandria
Coris	Heath low Pine	Pentandria, Monogynia
Corispermum	Tickseed	Monandria, Digynia
Cornucopia		Triandria, Digynia
Cornus	Dogwood, or Cornelian Cherry	Tetrandria, Monogynia
Cornutia		Didynamia, Angiosper.
Coronilla	Jointed-podded Colutea	Diadelphia, Decandria
Corrigiola		Pentandria, Trigynia
Cortufa	Bear's Ear Sanicle	Pentandria, Monogynia
Corylus	Hazel, or Nut-Tree	Monoecia, Polyandria
Corymbium		Syngenesia, Monogamia
Corypha		Palmae
Costus		Monandria, Monogynia
Cotula		Syngenesia, Polyg. superfl.
Cotyledon	Navel-wort	Decandria, Pentagynia
Crambe	Sea Cabbage	Tetradynamia, Siliquosa
Crameria		Tetrandria, Monogynia
Craneolaria		Didynamia, Angiosper.
Crassula	Lesser Orpine	Pentandria, Pentagynia
Cratægus	Wild Service	Icosandria, Digynia
Crataeva	Garlick Pear	Dodecandria, Monogyn.
Crepis	Bastard Hawkweed	Syngenesia, Polyg. æqual.
Crescentia	Calabash-Tree	Didynamia, Angiosper.
Cressa		Pentandria, Digynia
Crinum	Asphodel Lilly	Hexandria, Monogynia
Crithmum	Samphire	Pentandria, Digynia

Cro-

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Crocus	Saffron	Triandria, Monogynia
Crotalaria		Diadelphia, Decandria
Croton	Tallow-tree, or Bastard Ricinus	Monoecia, Monadelphia
Crucianella	Petty Madder	Tetrandria, Monogynia
Cruzita		Tetrandria, Digynia
Cucubalus	Berry-bearing Chick- weed	Decandria, Trigynia
Cucumis	Cucumber	Monoecia, Syngenesia
Cucurbita	Gourd	Monoecia, Syngenesia
Cuminum	Cumin	Pentandria, Digynia
Cunila		Diandria, Monogynia
Cunonia		Decandria, Digynia
Cupania		Monoecia, Monadelphia
Cupressus	Cypress	Monoecia, Monadelphia
Curatella		Polyandria, Digynia
Curcuma	Turmeric	Monandria, Monogynia
Cuscuta	Dodder	Tetrandria, Digynia
Cyanella		Hexandria, Monogynia
Cycas	Sego Palm	Cryptogamia, Filices
Cyclamen	Sowbread	Pentandria, Monogynia
Cymbaria		Didynamia, Angiosper.
Cynanchum		Pentandria, Digynia
Cynara	Artichoke	Syngenesia, Polyg. æqua.
Cynoglossum	Hound's-Tongue	Pentandria, Monogynia
Cynomëtra		Decandria, Monogynia
Cynomorium		Monoecia, Monandria
Cynosurus	Dog's-tail Grass	Triandria, Digynia
Cyperus	English Galingale	Triandria, Monogynia
Cypripedium	Ladies Slipper	Gynandria, Diandria
Cyrilla		Pentandria, Monogynia
Cytinus		Gynandria, Dodecandria
Cytisus	Base Tree Trefoil	Diadelphia, Decandria
D		
Dactylis	Cock's-Foot Grass	Triandria, Digynia
Dais		Decandria, Monogynia
Dalechampia		Monoecia, Monadelphia
Daphne	Mezereon, or Spurge- Laurel	Octandria, Monogynia
Datisca	Bastard Hemp	Dioecia, Dodecandria
Datura	Thorn Apple	Pentandria, Monogynia
Daucus	Carrot	Pentandria, Digynia

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Decumaria		Dodecandria, Monogyn.
Delima		Polyandria, Monogynia
Delphinium	Larkspur	Polyandria, Trigynia
Dentaria	Tooth-wort	Tetradynamia, Siliquosa
Dialium		Diandria, Monogynia
Dianthera		Diandria, Monogynia,
Dianthus	Pink, or Carnation	Decandria, Digynia
Diapensia		Pentandria, Monogynia
Dictamnus	Fraxinella, or white Dit- tany	Decandria, Monogynia
Digitalis	Fox-glove	Didynamia, Angiosper.
Dillenia		Polyandria, Polygynia
Diodia		Tetrandria, Monogynia
Dionæa	Venus's Fly-trap	Decandria, Monogynia
Dioscorea		Dioecia, Hexandria
Diosma	African Spirea	Pentandria, Monogynia
Diospyrus	Indian Date Plum	Polygamia, Dioecia
Dirca	Leather-wood	Octandria, Monogynia
Dipsacus	Teazel	Tetrandria, Monogynia
Difandra		Heptandria, Monogynia
Dodartia		Didynamia, Angiosper.
Dodecatheon	Meadia	Pentandria, Monogynia
Dodonæa		Octandria, Monogynia
Dolichos		Diadelphia, Decandria
Doronicum	Leopard's Bane	Syngenesia, Polyg.super.
Dorstenia	Contrayerva	Tetrandria, Monogynia
Draba	Whitlow-grass	Tetradynamia, Siliquosa
Dracæna		Hexandria, Monogynia
Dracocephalum	Dragon's Head	Didynamia, Angiosper- mia
Dracontium	Dragons	Gynandria, Polyandria
Drosera	Sun-dew	Pentandria, Pentagynia
Dryas		Icosandria, Polygynia
Drypis		Pentandria, Trigynia
Duranta		Didynamia, Angiosper.
Durio		Polyadelphia, Polyandr.
E		
Ebenus	Ebony of Crete	Diadelphia, Decandria
Echinophora	Prickly Parsnip	Pentandria, Digynia
Echinops	Globe-thistle	Syngenesia, Polygamia, segregata
Echites		Pentandria, Monogynia

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Echium	Viper's Bugloss	Pentandria, Monogynia
Eclipta		Syngenesia, Polyg. super.
Ehretia		Pentandria, Monogynia
Elæagnus	Wild Olive	Tetrandria, Monogynia
Elæocarpus		Polyandria, Monogynia
Elaeis		Palmae
Elate		Palmae
Elaterium		Monoecia, Monandria
Elatine	Water-wort	Ostandria, Trigynia
Elephantopus	Elephant's Foot	Syngenesia, Polyg. Se- gregata
Ellisia		Pentandria, Monogynia
Elymus		Triandria, Digynia
Empetrum	Black-berried Heath, or Crow-berries	Dioecia, Triandria
Ephedra	Shrubby Horse-tail	Dioecia, Monadelphia
Epidendrum	Vanilla, or Vanelloe	Gynandria, Diandria
Epigæa	Trailing Arbutus	Decandria, Monogynia
Epilobium	Willow Herb, or French Willow	Ostandria, Monogynia
Epimedium	Barren-wort	Tetrandria, Monogynia
Equisetum	Horse-tail	Cryptogamia, Filices
Eranthemum		Diandria, Monogynia
Erica	Heath	Ostandria, Monogynia
Erigeron		Syngenesia, Polyg. super.
Erinus		Didynamia, Angiosper.
Eriocaulon		Triandria, Trigynia
Erioccephalus		Syngenesia, Polyg. neces.
Eriophorum		Triandria, Monogynia
Erithalis		Pentandria, Monogynia
Ervum	Bitter Vetch	Diadelphia, Decandria
Eryngium	Eryngo, or Sea Holly	Pentandria, Digynia
Erysimum	Hedge Mustard	Tetradynamia, Siliquosa
Erythrina	Coral-tree	Diadelphia, Decandria
Erythronium	Dog's-tooth Violet	Hexandria, Monogynia
Erythroxyton		Decandria, Trigynia
Ethulia		Syngenesia, Polyg. æqualis
Euclea		Dioecia, Dodecandria
Eugenia		Icosandria, Monogynia
Evolvulus		Pentandria, Tetragynia
Euonymus	Spindle-tree	Pentandria, Monogynia
Eupatorium	Hemp Agrimony	Syngenesia, Polyg. æqualis
Euphorbia	Burning Thorny Plant, or Spurge	Dodecandria, Trigynia

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Euphrasia	Eyebright	Didynamia, Angiosper.
Exacum		Tetrandria, Monogynia
Excoecaria		Dioecia, Triandria
F		
Fagara		Tetrandria, Monogynia
Fagonia		Decandria, Monogynia
Fagus	Beech	Monoecia, Polyandria
Ferula	Fennel Giant	Pentandria, Digynia
Ferraria		Gynandria, Triandria
Festuca	Fescue Grass	Triandria, Digynia
Fevillea		Dioecia, Pentandria
Ficus	Fig	Polygamia, Polyoechia
Filago	Cotton Weed	Syngenesia, Polyg. necessaria
Flagellaria		Hexandria, Trigynia
Fontinalis	Water Moss	Cryptogamia, Musci
Forskohlea		Decandria, Pentagynia
Pothergilla		Polyandria, Digynia
Fragaria	Strawberry	Icosandria, Polygynia
Frankenia		Hexandria, Monogynia
Fraxinus	Ash	Polygamia, Dioecia
Fritillaria	Fritillary	Hexandria, Monogynia
Fuchsia		Octandria, Monogynia
Fucus	Wrack, or Sea-weed	Cryptogamia, Algæ
Fumaria	Fumitory	Diadelphia, Hexandria
Fusanus		Polygamia, Monoecia
G		
Galanthus	Snow-drop	Hexandria, Monogynia
Galax		Pentandria, Monogynia
Galega	Goats Rue	Diadelphia, Decandria
Galenia		Octandria, Digynia
Galeopsis	Hedge Nettle	Didynamia, Gymnosper.
Galium	Lady's-Bedstraw	Tetrandria, Monogynia
Garcinia		Dodecandria, Monogyn.
Gardenia	Cape Jasmine	Pentandria, Monogynia
Garidella	Fennel-Flower of Crete	Decandria, Trigynia
Gaultheria		Decandria, Monogynia
Gaura	Virginian Loosestrife	Octandria, Monogynia
Genipa		Pentandria, Monogynia
Genista	Single-seeded Broom	Diadelphia, Decandria
		Gen-

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Gentiana	Gentian, or Fell-wort	Pentandria, Digynia
Geoffroya		Diadelphia, Decandria
Geranium	Crane's Bill	Monodelphia, Decandria
Gerardia		Didynamia, Angiosper.
Geropogon		Syngenesia, Polyg. aqua.
Gesneria		Didynamia, Angiosper.
Gethyllis		Dodecandria, Monogyn.
Geum	Aven's, or Herb Bennet	Icosandria, Polygynia
Ginora		Dodecandria, Monogyn.
Gisekia		Pentandria, Pentagynia
Glabraria		Polyadelphia, Polyandr.
Gladiolus	Corn Flag	Triandria, Monogynia
Glaux	Sea Milk-wort, or Black Salt-wort	Pentandria, Monogynia
Glechoma	Ground Ivy, or Gill	Didynamia, Gymnosper.
Gleditsia	Three-thorned Acacia	Polygamia, Dioecia
Glinus		Dodecandria, Pentagyn.
Globba		Diandria, Monogynia
Globularia	Blue Daisy	Tetrandria, Monogynia
Gloriosa	Superb Lily	Hexandria, Monogynia
Gluta		Gynandria, Pentandria
Glycine	Carolina Kidney bean-tree	Diadelphia, Decandria
Glycyrrhiza	Liquorice	Diadelphia, Decandria
Gmelina		Didynamia, Angiosper.
Gnaphalium	Cudweed	Syngenesia, Polyg. super.
Gnetum		Monoecia, Monadelphia
Gnidia		Octandria, Monogynia
Gomphrena	Globe Amaranth	Pentandria, Digynia
Gordonia		Monodelphia, Polyandr.
Gorteria		Syngenesia, Polyg. frutr.
Gossypium	Cotton	Monadelphia, Polyandr.
Gouania		Polygamia, Monoecia
Gratiola	Hedge Hyssop	Diandria, Monogynia
Grewia		Gynandria, Polyandria
Grias		Polyandria, Monogynia
Griecum		Decandria, Pentagynia
Griflea		Octandria, Monogynia
Gronovia		Pentandria, Monogynia
Guaiacum	Lignum Vitæ	Decandria, Monogynia
Guarea		Octandria, Monogynia
Guettarda		Monoecia, Heptandria
Guilandina	Bonduc, or Nickar-tree	Decandria, Monogynia

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Gundelia		Syngenesia, Polyg. segregata
Gunnera		Gynandria, Diandria
Gypsophila		Decandria, Digynia
H		
Hæmanthus	Blood Flower	Hexandria, Monogynia
Hæmatoxylum	Logwood	Decandria, Monogynia
Hallefia		Dodecandria, Monogyn.
Halleria	African Fly-honey-suckle	Didynamia, Angiosper.
Hamamelis	Witch Hazel	Tetrandria, Digynia
Hamellia		Pentandria, Monogynia
Hasselquistia		Pentandria, Digynia
Hebenitretia		Didynamia, Angiosper.
Hedera	Ivy	Pentandria, Monogynia
Hedyotis		Tetrandria, Monogynia
Hedysarum	French Honeyfuckle	Diadelphia, Decandria
Heisteria		Decandria, Monogynia
Helenium	Bastard Sunflower	Syngenesia, Polyg. super.
Helianthus	Sun-Flower	Syngenesia, Polyg. frutr.
Heliconia		Pentandria, Monogynia
Heliosores	Skrew Tree	Gynandria, Decandria
Heliocarpus		Dodecandria, Digynia
Heliophila		Tetradynamia, Siliquosa
Heliotropium	Turn-Sole	Pentandria, Monogynia
Helonias		Hexandria, Trigynia
Helleborus	Black Hellebore	Polyandria, Polygynia
Helvella		Cryptogamia, Fungi
Hemerocallis	Day Lily, or Lily Asphodel	Hexandria, Monogynia
Hemionitis	Mule's Fern	Cryptogamia, Filices
Heracleum	Cow Parsnep	Pentandria, Digynia
Hermannia		Monadelphia, Pentandr.
Hermas		Polygamia, Monoecia
Hernandia	Jack in a Box	Monoecia, Triandria
Herniaria	Rupture-wort	Pentandria, Digynia
Hesperis	Dame's Violet, Rocket, or Queen's July Flow.	Tetradynamia, Siliquosa
Heuchera		Pentandria, Digynia
Hibiscus	Althea Frutex, or Syrian Mallow	Pentandria, Digynia
Hieracium	Hawkweed	Syngenesia, Polyg. æqua.
Hillia		Hexandria, Monogynia
		Hip-

GENERA	ENGLISH NAMES.	CLASSES and ORDERS.
Hippia		Syngenesia, Polyg. Ne- cessaria
Hippocratea		Triandria, Monogynia
Hippocrepis	Horseshoe Vetch	Diadelphia, Decandria
Hippomane	Manchineel	Monocelia, Monadelphia
Hippophae	Sea Buck-thorn	Dioecia, Tetrandia
Hippuris		Monandria, Monogynia
Hiræa		Decandria, Trigynia
Hirtella		Pentandria, Monogynia
Holcus	Indian Millet	Polygamia, Monocelia
Holotheum		Triandria, Trigynia
Hopea		Polyadelphia, Polyandria
Hordeum	Barley	Triandria, Digynia
Horminum	Pyrenæan Clary	Didynamia, Gymnosper.
Hottonia	Water Milfoil, or Water Violet	Pentandria, Monogynia
Houstonia		Tetrandia, Monogynia
Hudsonia		Dodecandria, Monogyn.
Hugonia		Monadelphia, Decandria
Humulus	Hop	Dioecia, Pentandria
Hura	Sand Box-Tree	Monocelia, Monadelphia
Hyacinthus	Hyacinth	Hexandria, Monogynia
Hydnum		Cryptogamia, Fungi
Hydrangea		Decandria, Monogynia
Hydrastis	Yellow Root	Polyandria, Polygynia
Hydrocharis	Frog's-bit	Dioecia, Enneandria
Hydrocotyle	Water Navel-wort	Pentandria, Digynia
Hydrolea		Pentandria, Digynia
Hydrophyl- lum	Water Leaf	Pentandria, Monogynia
Hymenæa	Locust-tree, or Courbaril	Decandria, Monogynia
Hyobanche		Didynamia, Angiosper.
Hyoscyamus	Henbane	Pentandria, Monogynia
Hyoseris		Syngenesia, Polyg. æqu.
Hypoxis		Hexandria, Monogynia
Hypocoum		Tetrandia, Digynia
Hypericum	St. John's Wort	Polyadelphia, Polyandria
Hypnum		Cryptogamia, Musci
Hypochæris		Syngenesia, Polyg. æqu.
Hyssopus	Hyssop	Didynamia, Gymnosper.
I Jambolifera		Oständria, Monogynia Jac-

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Jacquinia		Pentandria, Monogynia
Jasione	Sheep Scabious	Syngenesia, Monogamia
Jasminum	Jasmine	Diandria, Monogynia
Jatropha	Cassava	Monoeceia, Monadelphina
Iberis	Candy Tuft, or Sciatic Cress	Tetradynamia, Siliculosa
Ilex	Holly	Tetrandria, Tetragynia
Illecebrum	Mountain Knot Grass	Pentandria, Monogynia
Illicium		Polyandria, Polygynia
Impatiens	Balsam, or Female Bal- samine	Syngenesia, Monogamia
Imperatoria	Masterwort	Pentandria, Digynia
Indigofera	Indigo	Diadelphina, Decandria
Inula	Elecampane	Syngenesia, Polyg. super.
Ipomea	Quamoclit	Pentandria, Monogynia
Irefine		Dioecia, Pentandria
Iris	Flower de Luce	Triandria, Monogynia
Isatis	Woad	Tetradynamia, Siliquosa
Ischæmum		Polygamia, Monoeceia
Isnardia		Tetrandria, Monogynia
Isoëtis		Cryptogamia, Filices
Isopyrum		Polyandria, Polygynia
Itea		Pentandria, Monogynia
Iva	Jesuits Bark Tree	Monoeceia, Pentandria
Juglans	Wallnut	Monoeceia, Polyandria
Juncus	Rush	Hexandria Monogynia
Jungermannia		Cryptogamia, Algæ
Juniperus	Juniper	Dioecia, Monadelphina
Jussieua		Decandria, Monogynia
Justicia	Malabar Nut	Diandria, Monogynia
Ixia		Triandria, Monogynia
Ixora		Tetrandria, Monogynia

K

Kalmia	Dwarf American Laurel	Decandria, Monogynia
Kaempferia		Monandria, Monogynia
Kiggelaria		Dioecia, Decandria
Kleinhovia		Gynandria, Decandria
Knautia		Tetrandria, Monogynia
Knoxia		Tetrandria, Monogynia
Koenigia		Triandria, Trigynia
Kuhnia		Pentandria, Monogynia

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GENERA. ENGLISH NAMES. CLASSES and ORDERS.

L

Lachnæa		Ostendria, Monogynia
Lactuca	Lettuce	Syngenesia, Polyg. æqu.
Laetia		Polyandria, Monogynia
Lagerstroemia		Polyandria, Monogynia
Lagoecia	Bastard Cumin	Pentandria, Monogynia
Lagurus	Hare's Tail Grass	Triandria, Digynia
Lamium	Dead Nettle, or Arch-angel	Didynamia, Gymnosper.
Lantana	American Viburnum	Didynamia, Angiosper.
Lapsana	Nipple-wort	Syngenesia, Polyg. æqu.
Laferpitium	Lafer-wort	Pentandria, Digynia
Lathræa		Didynamia, Angiosper.
Lathyrus	Chichling Vetch	Diadelphia, Decandria
Lavendula	Lavender	Didynamia, Angiosper.
Lavatera		Monadelphia, Polyand.
Laugieria		Pentandria, Monogynia
Laurus	Bay	Enneandria, Monogynia
Lawsonia		Ostendria, Monogynia
Leea		Monoecia, Pentandria
Lechea		Triandria, Trigynia
Lecythis		Polyandria, Monogynia
Ledum	Marsh Cistus, or wild Rosemary	Decandria, Monogynia
Lemna	Duck Meat	Monoecia, Diandria
Leontice	Lion's Leaf	Hexandria, Monogynia
Leontodon	Dandelion	Syngenes. Polyg. æqual.
Leonurus	Lion's Tail	Didynamia, Gymnosper.
Lepidium	Dittander, or Pepper-wort	Tetradynamia, Siliculosa
Lerchea		Monadelphia, Pentandr.
Leucojum	Greater Snow-drop	Hexandria, Monogynia
Leysera		Syngenesia, Polyg. super.
Lichen	Liver-wort	Cryptogamia, Algæ
Ligusticum	Lovage	Pentandria, Digynia
Ligustrum	Privet	Diandria, Monogynia
Lilium	Lily	Hexandria, Monogynia
Limeum		Heptandria, Digynia
Limodorum		Gynandria, Diandria
Limonia		Decandria, Monogynia
Limosella	Least Water Plantain	Didynamia, Angiosper.
Lindernia		Didynamia, Angiosper.
Linconia		Pentandria, Digynia

Lin.

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Linnæa		Didynania, Angiosper.
Linum	Flax	Pentandria, Pentagynia
Liparia		Diadelphia, Decandria
Lippia		Didynania, Angiosper.
Liquidamber	Sweet Gum	Monoecia, Polyandria
Liriodendrum	Tulip Tree	Polyandria, Polygynia
Lisianthus		Pentandria, Monogynia
Lithospermum	Gromwell	Pentandria, Monogynia
Littorella		Monoecia, Tetrandria
Lobelia	Cardinal Flower	Syngenesia, Monogamia
Loeflingia		Triandria, Monogynia
Loefelia		Didynania, Angiosper.
Lolium	Darnel, or Ryè-grass	Triandria, Digynia
Lonchites	Rough Spleen-wort	Cryptogamia, Filices
Lonicera	Honeysuckle	Pentandria, Monogynia
Loofa		Polyandria, Monogynia
Loranthus		Hexandria, Monogynia
Lorus	Bird's Foot Trefoil	Diadelphia, Decandria
Ludwigia		Tetrandria, Monogynia
Lunaria	Moon-wort, Sattin Flow- er, or Honesty	Tetradynamia, Siliculof.
Lupinus	Lupine	Diadelphia, Decandria
Lychnis	Campion	Decandria, Pentagynia
Lycium	Box-thorn	Pentandria, Monogynia
Lycoperdon		Cryptogamia, Fungi
Lycopodium	Wolf's Claw Moss	Cryptogamia, Musci
Lycopsis		Pentandria, Monogynia
Lycopus	Water Horehound	Decandria, Monogynia
Lygeum	Hooded Matweed	Triandria, Monogynia
Lylimachia	Loofestrise	Pentandria, Monogynia
Lythrum	Willow Herb	Dodecandria, Monogyn.
M		
Macrocnemum		Pentandria, Monogynia
Magnolia	Laurel-leaved Tulip-tree	Polyandria, Polygynia
Mahernia		Pentandria, Pentagynia
Malachra		Monadelphia, Polyandr.
Malope	Bastard Mallow	Monadelphia, Polyandr.
Malpighia	Barbadoes Cherry	Decandria, Trigynia
Malva	Mallow	Monadelphia, Polyandr.
Mammea	Mammee	Polyandria Monogynia
		Ma-

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GENERA	ENGLISH NAMES.	CLASSES and ORDERS.
Manettia		Tetrandria, Monogynia
Mangifera	Mango-tree	Pentandria Monogynia
Manisuris		Polygamia, Monoecia
Manulea		Didynamia, Angiosper.
Maranta	Indian Arrow-root	Monandria, Monogynia
Marcgravia		Polyandria, Polygynia
Marchantia		Cryptogamia, Algæ
Marrubium	Horehound	Didynamia, Gymnosper.
Marfilea		Cryptogamia, Filices
Martynia		Didynamia, Angiosper.
Matricaria	Feverfew	Syngenes. Polyg. super.
Matthiola		Appendix
Medeola	Climbing African Af- paragus	Hexandria, Trigynia
Medicago	Snail and Moon Trefoil	Diadelphia, Decandria
Melaleuca		Polyadelphia, Polyandr.
Melampo- dium		Syngenesia Polygamia necessaria
Melampyrum	Cow-wheat	Didynamia, Angiosper.
Melanthium		Hexandria, Trigynia
Melastoma	American Gooseberry	Decandria, Monogynia
Melia	Bead-tree	Decandria, Monogynia
Melianthus	Honey Flower	Didynamia, Angiosper.
Melica		Triandria, Digynia
Melicocca		Ostandria, Monogynia
Melissa	Baulm	Didynamia, Gymnosper.
Melittis	Baulm-leaved Archangle or Bastard Baulm	Didynamia, Gymnosper.
Melochia		Monadelphia, Pentandr.
Melotheria	Small creeping Cucum- ber	Triandria, Monogynia
Memecylon		Ostandria, Monogynia
Menais		Pentandria, Monogynia
Menispermum	Moon Seed	Dioecia, Dodecandria
Mentha	Mint	Didynamia, Gymnosper.
Mentzelia		Polyandria, Monogynia
Mehyanthes	Bog-bean, or Marsh Trefoil	Pentandria, Monogynia
Mercurialis	Mercury	Dioecia, Enneandria
Mesembryan- themum	Fig Marygold	Icosandria, Pentagynia
Messerschmi- dia		Pentandria, Monogynia
Mespilus	Medlar	Icosandria, Pentagynia Me.

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Mesua	Indian Rose Chesnut	Monadelphia, Polyandr.
Michelia		Polyandria, Polygynia
Micropus	Bastard Cudweed	Syngenes. Polyg. Necef.
Milium	Miller	Triandria, Digynia
Milleria		Syngenesia, Polyg. necef.
Mimosa	Sensitive Plant	Polygamia, Monoecia
Mimulus	Monkey Flower	Didynamia, Angiosper.
Mimusops		Ostandia, Digynia
Minuartia		Triandria, Trigynia
Mirabilis	Marvel of Peru	Pentandria, Monogynia
Mitchella		Tetrandria, Monogynia
Mitella	Bastard American Sanicle	Decandria, Digynia
Mnium		Cryptogamia, Musci
Moehringia	Mountain Chickweed	Ostandia, Digynia
Mollugo		Triandria, Trigynia
Moluccella	Molucca Baulm	Didynamia, Gymnosper.
Momordica	Male Balsam Apple	Monoecia, Syngenesia
Monarda	Oswego Tea	Diandria, Monogynia
Monnieria		Diadelphia, Pentandria
Monotropa		Decandria, Monogynia
Monsonia		Polyadelphia, Dodecand.
Montia	Blinks	Triandria, Trigynia
Moræa		Triandria, Monogynia
Morina		Diandria, Monogynia
Morinda		Pentandria, Monogynia
Morisonia		Polyandria, Monogynia
Morus	Mulberry Tree	Monoecia, Tetrandria
Mucor		Cryptogamia, Fungi
Munchausia		Polyadelphia, Polyandr.
Muntingia		Polyandria, Monogynia
Murraya		Decandria, Monogynia
Musa	Plantain-tree	Polyandria, Monoecia
Mussaenda		Pentandria, Monogynia
Myagrurn	Gold of Pleasure	Tetradynamia, Siliculosa
Myianda		Tetrandria, Tetragynia
Myosotis	Moufe-ear Scorpion- grafs	Pentandria, Monogynia
Myosurus	Moufe-tail	Pentandria, Monogynia
Myrica	Candleberry Myrtle- Gale, or Sweet Willow	Dioecia, Tetrandria
Myriophyl- lum	Water Milfoil	Monoecia, Polyandria
Myrsine	African Box-tree	Pentandria, Monogynia
Myrtus	Myrtle	Icosandria, Monogynia

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GENERA. ENGLISH NAMES. CLASSES and ORDERS.

N

Najas		Dioecia, Monandria
Nama		Pentandria, Digynia
Napæa		Dioecia, Monadelphia
Narcissus	Daffodil	Hexandria, Monogynia
Nardus		Triandria, Monogynia
Nauclea		Pentandria, Monogynia
Nepenthes		Gynandria, Tetrandria
Nepeta	Catmint, or Nep	Didynamia, Gymnosper.
Nephelium		Monoecia, Pentandria
Nerium	Oleander, or Rose Bay	Pentandria, Monogynia
Neurada		Decandria, Decagynia
Nicotiana	Tobacco	Pentandria, Monogynia
Nigella	Fennel Flower, or Devil in a Bush	Polyandria, Pentagynia
Nigrina		Pentandria, Monogynia
Nesfolia		Diadelphia, Decandria
Nitraria		Dodecandria, Monogyn.
Nolana		Pentandria, Monogynia
Nyctanthes	Arabian Jasmine	Diandria, Monogynia
Nymphæa	Water Lily	Polyandria, Monogynia
Nyssa	Tupelo Tree	Polygamia, Dioecia

O

Obolaria		Didynamia, Angiosper.
Ochna		Polyandria, Monogynia
Ocymum	Basil	Didynamia, Gymnosper.
Oedera		Syngenesia, Polygamia, Segregata
Oenanthe	Water Drop-wort	Pentandria, Digynia
Oenothera	Tree Primrose	O&tandria, Monogynia
Olaix		Triandria, Monogynia
Oldenlandia		Tetrandria, Monogynia
Olea	Olive	Diandria, Monogynia
Olyra		Monoecia, Triandria
Omphalea		Monoecia, Triandria
Onoclea	Sensible Polypody	Cryptogamia, Filices
Ononis	Rest Harrow	Diadelphia, Decandria
Onopordum	Woolly Thistle	Syngenes. Polyg. æqua.
Onosma		Pentandria, Monogynia
Ophioglossum	Adder's Tongue	Cryptogamia, Filices
Ophiorrhiza	Serpents Tongue	Pentandria, Monogynia
		Ophio-

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Ophioxylon		Polygamia, Monoëcia
Ophira		Ostandia, Monogynia
Ophrys	Twyblade	Gynandria, Diandria
Orchis		Gynandria, Diandria
Origanum	Wild Marjorum	Didynamia, Gymnosper.
Ornithogalum	Star of Bethlem	Hexandria, Monogynia
Ornithopus	Bird's Foot	Diadelphia, Decandria
Orobanchæ	Broom Rape	Didynamia, Angiosper.
Orobis	Bitter Vetch	Diadelphia, Decandria
Orontium	Floating Arum	Hexandria, Monogynia
Ortegia		Triandria, Monogynia
Oryza	Rice	Hexandria, Digynia
Osbeckia		Ostandia, Monogynia
Osmites		Syngenesia, Polyg. frustr.
Osunda	Osmond Royal, or Flow- ering Fern	Cryptogamia, Filices
Osteospermum	Hard seeded Chrysan- themum	Syngenesia, Polygamia, necessaria
Oxyris	Poet's Cassia	Dioecia, Triandria
Othonna	African Ragwort	Syngenes. Polyg. neces.
Ovieda		Didynamia, Angiosper.
Oxalis	Wood Sorrel	Decandria, Pentagynia
P		
Paederota		Diandria, Monogynia
Pæderia		Pentandria, Monogynia
Pæonia	Pæony	Polyandria, Digynia
Panax	Ginseng	Polygamia, Dioecia
Pancratium	Sea Daffodil	Hexandria, Monogynia
Panicum	Panic Grass	Triandria, Digynia
Papaver	Poppy	Polyandria, Monogynia
Parietaria	Pellitory	Polygamia, Monoecia
Paris	Herb True-love, or One Berry	Ostandia, Tetragynia
Parkinsonia		Decandria, Monogynia
Parnassia	Grass of Parnassus	Pentandria, Tetragynia
Parthenium	Bastard Feverfew	Monoecia, Pentandria
Paspalum		Triandria, Digynia
Passerina	Sparrow-wort	Ostandia, Monogynia
Passiflora	Passion Flower	Gynandria, Pentandria.
Pastinaca	Parsnep	Pentandria, Digynia
Patagonula		Pentandria, Monogynia
Pavetta		Tetrandria, Monogynia
		Pau-

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Paulinia		Ostandia, Trigynia
Paederia		Pentandria, Monogynia
Pectis		Syngenesia, Polyg. superfl.
Pedaliū		Didynamia, Angiosper.
Pedicularis	Rattle Coxcumb, or Louse-wort	Didynamia, Angiosper.
Peganum	Wild Syrian Rue	Dodecandria, Monogyn.
Peltaria		Tetradynamia, Siliculosa
Penæa		Tetrandria, Monogynia
Pentapetes		Monadelphica, Dodecand.
Penthorum		Decandria, Pentagynia
Peplis	Water Purflane	Hexandria, Monogynia
Perdicum		Syngenesia, Polyg. super.
Perilla		Didynamia, Gymnosper.
Periploca	Virginian Silk	Pentandria, Digynia
Pergularia		Pentandria, Monogynia
Petesia		Tetrandria, Monogynia
Petiveria	Guinea-hen Weed	Hexandria, Tetragynia
Petrea		Didynamia, Angiosper.
Peucedanum	Hog's Fennel, or Sul- phur-wort	Pentandria, Digynia
Peziza	Cup Mushroom	Cryptogamia, Fungi
Phaca	Bastard Milk Vetch	Diadelphia, Decandria
Phalaris	Canary Grass	Triandria, Trigynia
Phallus	Stink-horns	Cryptogamia, Fungi
Pharnaceum		Pentandria, Trigynia
Pharus		Monoecia, Hexandria
Phascum		Cryptogamia, Musci
Phaseolus	Kidney-bean	Diadelphia, Decandria
Phellandrium		Pentandria, Digynia
Philadelphus	Mock Orange	Icosandria, Monogynia
Phillyrea	Mock Privet	Diandria, Monogynia
Phleum	Cat's-tail Grass	Triandria, Digynia
Phlomis	Jerusalem Sage	Didynamia, Gymnosper.
Phlox	Lychnidea, or bastard Lychnis	Pentandria, Monogynia
Phoenix	Common Palm, or Date Palmæ Tree	
Phryma		Didynamia, Gymnosper.
Phyllica	Bastard Alaternus	Pentandria, Monogynia
Phyllanthus	Sea-side Laurel	Monoecia, Triandria
Phyllis	Bastard Hare's-ear	Pentandria, Digynia
Physalis	Alkekengi, or Winter Cherry	Pentandria, Monogynia

U

Phy-

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Phyteuma	Rampions	Pentandria, Monogynia
Phytolacca	American Nightshade	Decandria, Decagynia
Picris		Syngenes. Polyg. æqua.
Pilularia	Pepper Grass	Cryptogamia, Filices
Pimpinella	Burnet Saxifrage	Pentandria, Digynia
Pinguicula	Butter-wort	Diandria, Monogynia
Pinus	Pine Tree	Monoecia, Monadelphina
Piper	Pepper	Diandria Trigynia
Piscidia		Diadelphina, Decandria
Pistacia	Pistacia Nut	Dioecia, Pentandria
Pisonia	Fingrigo	Polygamia, Dioecia
Pistia		Gynandria, Hexandria
Pisum	Pea	Diadelphia, Decandria
Plantago	Plantain	Tetrandria, Monogynia
Platanus	Plane Tree	Monoecia, Polyandria
Plectrionia		Pentandria, Monogynia
Plinia		Polyandria, Monogynia
Plukenetia		Monoecia, Monadelphina
Plumbago	Lead-wort	Pentandria, Monogynia
Plumeria	Red Jasmine	Pentandria, Monogynia
Poa		Triandria, Digynia
Podophyllum	Duck's-Foot, or May Apple	Polyandria, Monogynia
Poinciana	Barbadoes Flower-fence	Decandria, Monogynia
Polemonium	Greek Valerian	Pentandria, Monogynia
Polyanthes	Tuberose	Hexandria, Monogynia
Polycarpon		Triandria, Trigynia
Polychemum		Triandria, Monogynia
Polygala	Milk-wort	Diadelphia, Octandria
Polygonum	Knot-grass	Octandria, Trigynia
Polymnia		Syngenesia, Polyg. neces.
Polypodium	Polypody	Cryptogamia, Filices
Polypremum	Carolina Flax	Tetrandria, Monogynia
Polytrichum	Golden Maiden-hair	Cryptogamia, Musci
Pontederia		Hexandria, Monogynia
Populus	Poplar	Dioecia, Octandria
Porana		Pentandria, Monogynia
Porella		Cryptogamia, Musci
Portlandia		Pentandria, Monogynia
Portulaca	Purslane	Dodecandria, Monogyn.
Potamogeton	Pond-weed	Tetrandria, Tetragynia
Potentilla	Cinquefoil	Icofandria, Polygynia
Poterium	Burnet	Monoecia, Polyandria
Pothos		Gynandria, Polyandria

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GENERA	ENGLISH NAMES.	CLASSES and ORDERS
<i>Praefium</i>	Shrubby Hedge-Nettle	Didynamia, Gymnosper.
<i>Prenanthes</i>	Wild Lettuce	Syngenesia, Polyg.æqua.
<i>Premna</i>		Didynamia, Angiosper.
<i>Primula</i>	Primrose	Pentandria, Monogynia
<i>Prinos</i>	Winter-Berry	Hexandria, Monogynia
<i>Prockia</i>		Polyandria, Monogynia
<i>Proserpinaca</i>		Triandria, Trigynia
<i>Profopis</i>		Decandria, Monogynia
<i>Protea</i>	Silver-tree	Tetrandia, Monogynia
<i>Prunella</i>	Self-heal	Didynamia, Gymnosper.
<i>Prunus</i>	Plum-tree	Icosandria, Monogynia
<i>Pfidium</i>	Guayava, or Bay Plum	Icosandria, Monogynia
<i>Pforalea</i>		Diadelphia, Decandria
<i>Ppsychotria</i>		Pentandria, Monogynia
<i>Ptelea</i>	Shrub Trefoil	Tetrandia, Monogynia
<i>Pteris</i>	Brakes, or Female Fern	Cryptogamia, Filices
<i>Pterocarpus</i>		Diadelphia, Decandria
<i>Pteronia</i>		Syngenesia, Polyg.æqua.
<i>Pulmonaria</i>	Lung-wort	Pentandria, Monogynia
<i>Punica</i>	Pomegranate	Icosandria, Monogynia
<i>Pyrola</i>	Winter Green	Decandria, Monogynia
<i>Pyrus</i>	Pear	Icosandria, Pentagynia
Q		
<i>Quassia</i>		Decandria, Monogynia
<i>Quercus</i>	Oak	Monoecia, Polyandria
<i>Queria</i>		Tetrandia, Trigynia
<i>Quisqualis</i>		Decandria, Monogynia
R		
<i>Rajania</i>		Dioecia, Hexandria
<i>Randia</i>		Pentandria, Monogynia
<i>Ranunculus</i>	Crowfoot	Polyandria, Polygynia
<i>Raphanus</i>	Radish	Tetradynamia, Siliquosa
<i>Rauvolfia</i>		Pentandria, Monogynia
<i>Reaumuria</i>		Polyandria, Pentagynia
<i>Reseda</i>	Bastard Rocket	Dodecandria, Trigynia
<i>Restio</i>		Dioecia, Triandria
<i>Rhacoma</i>		Tetrandia, Monogynia
<i>Rhamnus</i>	Buckthorn	Pentandria, Monogynia
<i>Rheedia</i>		Polyandria, Monogynia
<i>Rheum</i>	Rhubarb	Enneandria, Trigynia

U 2

Rhe-

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Rhexia		Ostandia, Monogynia
Rhinanthus	Elephant's Head	Didynamia, Angiosper.
Rhizophora	Candle of the Indians	Dodecandria, Monogynia
Rhodiola	Rose Root	Dioecia, Ostandia
Rhododendron	Dwarf Rose-bay	Decandria, Monogynia
Rhus	Sumach	Pentandria, Trigynia
Ribes	Currant Tree	Pentandria, Monogynia
Riccia	Marsh Liver-wort	Cryptogamia, Algæ
Richardia		Hexandria, Monogynia
Ricinus	Palma Christi	Monoecia, Monadelphia
Ricotia		Tetradynamia, Siliquosa
Rivina		Tetrandria, Monogynia
Robinia	False Acacia	Diadelphia, Decandria
Roëlla		Pentandria, Monogynia
Rondeletia		Pentandria, Monogynia
Roridula		Pentandria, Monogynia
Rosa	Rose	Icosandria, Polygynia
Rosmarinus	Rosemary	Diandria, Monogynia
Rotala		Triandria, Monogynia
Royena	African Bladder-nut	Decandria, Digynia
Rubia	Madder	Tetrandria, Monogynia
Rubus	Raspberry	Icosandria, Polygynia
Rudbeckia	Dwarf Sunflower	Syngenesia, Polyg. frust.
Ruellia		Didynamia, Angiosper.
Rumex	Dock	Hexandria, Trigynia
Rumphia		Triandria, Monogynia
Ruppia		Tetrandria, Tetragynia
Ruscus	Knee Holly, or Butchers Broom	Dioecia, Syngenesia
Ruta	Rue	Decandria, Monogynia
S		
Saccharum	Sugar Cane	Triandria, Digynia
Sagina	Pearl-wort	Tetrandria, Tetragynia
Sagittaria	Arrowhead	Monoecia, Polyandria
Salacia		Gynandria, Triandria
Salicornia	Jointed Glass-wort	Monandria, Monogynia
Salix	Willow	Dioecia, Diandria
Salsofa	Glass-wort	Pentandria, Digynia
Salvadora		Tetrandria, Tetragynia
Salvia	Sage	Diandria, Monogynia
Samara		Tetrandria, Monogynia
		Sam-

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
<i>Sambucus</i>	Elder	Pentandria, Trigynia
<i>Samolus</i>	Round-leaved Water-Pimpernel	Pentandria, Monogynia
<i>Samyda</i>		Decandria, Monogynia
<i>Sanguinaria</i>	Puccoon	Polyandria, Monogynia
<i>Sanguiforba</i>	Greater Wild Burnet	Tetrandria, Monogynia
<i>Sanicula</i>	Sanicle	Pentandria, Digynia
<i>Santalum</i>	Saunders	Tetrandria, Monogynia
<i>Santolina</i>	Lavender Cotton	Syngenesia, Polyg. æqua
<i>Sapindus</i>	Soap-berry	Octandria, Trigynia
<i>Saponaria</i>	Soap-wort	Decandria, Digynia
<i>Saraca</i>		Diadelphia, Hexandria
<i>Sarracena</i>	Sidesaddle Flower	Polyandria, Monogynia
<i>Sarothra</i>	Bastard Gentian	Pentandria, Trigynia
<i>Satureja</i>	Savory	Didynamia, Gymnosper.
<i>Satyrium</i>	Lizard Flower	Gynandria, Diandria
<i>Saururus</i>	Lizard's Tail	Heptandria, Trigynia
<i>Sauvagesia</i>		Pentandria, Monogynia
<i>Saxifraga</i>	Saxifrage	Decandria, Digynia
<i>Scabiosa</i>	Scabious	Tetrandria, Monogynia
<i>Scabrita</i>		Tetrandria, Monogynia
<i>Scandix</i>	Shepherd's Needle, or Venus's Comb	Pentandria, Digynia
<i>Scævola</i>		Pentandria, Monogynia
<i>Scheuchzeria</i>	Lesser Flowering Rush	Hexandria, Trigynia
<i>Schinus</i>	Indian Mastic	Dioecia, Decandria
<i>Schmedelia</i>		Octandria, Digynia
<i>Schoenus</i>	Bastard Cypress	Triandria, Monogynia
<i>Schrebera</i>		Pentandria, Digynia
<i>Schwalbea</i>		Didynamia, Angiosper.
<i>Schwenkia</i>		Diandria, Monogynia
<i>Scilla</i>	Squill	Hexandria, Monogynia
<i>Scirpus</i>	Rush-grass	Triandria, Monogynia
<i>Scleranthus</i>	German Knot-grass, or Knäwel	Decandria, Digynia
<i>Scolymus</i>	Golden Thistle	Syngenesia, Polyg. æqu.
<i>Scoparia</i>		Tetrandria, Monogynia
<i>Scorpiurus</i>	Caterpillars	Diadelphia, Decandria
<i>Scorzonera</i>	Viper-grass	Syngenesia, Polyg. æqualis
<i>Scrophularia</i>	Fig-wort	Didynamia, Angiosper.
<i>Scurrula</i>		Tetrandria, Monogynia
<i>Scutellaria</i>	Skull-cap	Didynamia, Gymnosper.
<i>Secale</i>	Rye	Triandria, Digynia
<i>Securidaca</i>		Diadelphia, Octandria

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Sedum	Lesser Houseleek	Decandria, Pentagynia
Seguieria		Polyandria, Monogynia
Selago		Didynamia, Angiosper.
Selinum	Milk Parsley	Pentandria, Digynia
Sempervivum	Houseleek	Dodecandria, Dodecagy.
Senecio	Groundsel	Syngenesia, Polyg. super.
Septas		Heptandria, Heptagynia
Serapias	Helleborine	Gynandria, Diandria
Seriola		Syngenesia, Polyg. æqual.
Seriphium		Syngenesia, Monogamia
Serpicula		Monoecia, Tetrandria
Serratula	Saw-wort	Syngenesia, Polyg. æqua.
Sesamum	Oily Purging Grain	Didynamia, Angiosper.
Seseli	Hartwort of Marfeilles	Pentandria, Digynia
Sesuvium		Icosandria, Trigynia
Sherardia	Little Field Maddar	Tetrandria, Monogynia
Sibbaldia		Pentandria, Pentagynia
Sibthorpia		Didynamia, Angiosper.
Sicyos	Single-seeded Cucumber	Monoecia, Syngenesia
Sida	Indian Mallow	Monadelphica, Polyandr.
Sideritis	Iron-wort	Didynamia, Gymnosper.
Sideroxylon	Iron-wood	Pentandria, Monogynia
Sigesbeckia		Syngenesia, Polyg. super.
Silene	Viscous Campion	Decandria, Trigynia
Silphium	Bastard Chrysanthemum	Syngenesia, Polyg. necessaria
Sinapis	Mustard	Tetradynamia, Siliquosa
Siphonanthus		Tetrandria, Monogynia
Sirium		Tetrandria, Monogynia
Sison	Bastard Stone Parsley	Pentandria, Digynia
Sisymbrium	Water Cresses	Tetradynamia, Siliquosa
Sisyrinchium	Bermudiana	Gynandria, Trigynia
Sium	Water Parsnep	Pentandria, Digynia
Sloanea	Apeiba of the Brasilians	Polyandria, Monogynia
Smilax	Rough Bindweed	Dicecia, Hexandria
Smyrnum	Alexanders	Pentandria, Digynia
Solandra		Polygamia, Monoecia
Solanum	Nightshade	Pentandria, Monogynia
Soldanella	Soldanel	Pentandria, Monogynia
Solidago	Golden Rod	Syngenesia Polyg. super.
Sonchus	Sow-Thistle	Syngenesia Polyg. æqual.
Sophora		Decandria, Monogynia
Sorbus	Service-Tree	Icosandria, Trigynia
Sparganium	Burr-Reed	Monoecia, Triandria

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Spartium	Broom	Diadelphia, Decandria
Spathelia		Pentandria, Trigynia
Spergula	Spurrey	Decandria, Pentagynia
Spermacoce	Button-Weed	Tetrandria, Monogynia
Sphæranthus	Globe Flower	Syngenesia, Polygamia, segregata
Sphagnum	Bog-mofs	Cryptogamia, Musci
Spigelia	Worm-grafs	Pentandria, Monogynia
Spilanthus		Syngenesia, Polyg. æqu.
Spinacia	Spinach	Dioecia, Pentandria
Spinifex		Polygamia, Monoecia
Spiræa	Spiræa Frutex	Icofandria, Pentagynia
Splachnum		Cryptogamia, Musci
Spondias	Brazilian Plum	Decandria, Pentagynia
Stachys	Base Horehound	Didynamia, Gymnosper.
Stæhelina		Syngenesia, Polyg. æqua.
Stapelia		Pentandria, Digynia
Staphylæa	Bladder-nut	Pentandria, Trigynia
Statice	Thrift or Sea pink	Pentandria, Pentagynia
Stellaria	Great Chickweed	Decandria, Trigynia
Stellera	German Groundfel	Ocfandria, Monogynia
Stemodia		Didynamia, Angiosper.
Sterculia		Monoecia, Monadelphia
Steris		Pentandria, Digynia
Stewartia		Monodelphia, Polyandr.
Stipa	Feather-grafs	Triandria, Digynia
Stilago		Gynandria, Triandria
Stilbe		Polygamia, Dioecia
Stillingia		Monoecia, Adelpia
Stoebe	Ballard Æthiopian Eli- chryfum	Syngenesia, Polygamia, segregata
Stratiotes	Water Soldier	Polyandria, Hexagynia
Struthiola		Tetrandria, Monogynia
Strumpfia		Syngenesia, Monogamia
Strychnus		Pentandria, Monogynia
Styrax	Storax Tree	Dodecandria, Monogyn.
Subularia	Rough-leaved Alysson	Tetradynamia, Siliculosa
Suriana		Decandria, Pentagynia
Swertia	Marsh Gentian	Pentandria, Digynia
Symphytum	Comphrey	Pentandria, Monogynia
Symplocas		Polyadelphia, Polyandr.
Syringa	Lilac	Diandria, Monogynia
Swietenia	Mahogany Tree	Decandria, Monogynia

GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
T		
Tabernæmon- tana		Decandria, Monogynia
Tagetes	African Marygold	Syngenes. Polyg. super.
Tamarindus	Tamarind Tree	Triandria, Monogynia
Tamarix	Tamarisk	Pentandria, Trigynia
Tamus	Black Bryony	Dioecia, Hexandria
Tanacetum	Tansy	Syngenes. Polyg. super.
Tarchonan- thus	Shrubby African Fleabane	Syngenes. Polyg. æqualis
Targionia		Cryptogamia, Algæ
Taxus	Yew Tree	Dioecia, Monadelphia
Telephium	True Orpine	Pentandria, Trigynia
Terminalia		Polygamia, Monoecia
Tetracera		Polyandria, Trigynia
Tetragonia		Icosandria, Pentagynia
Teucrium	Germander	Didynamia, Gymnosper.
Thalia		Monandria, Monogynia
Thalictrum	Meadow Rue	Polyandria, Polygynia
Thapsia	Deadly Carrot, or Scorching Fennel	Pentandria, Digynia
Thea	Tea Tree	Polyandria, Monogynia
Theligonum	Dog's Cabbage	Monoecia, Polyandria
Theobroma	Chocolate Nut	Polyadelphia, Pentandr.
Theophrasta		Pentandria, Monogynia
Theflum	Bastard Toad Flax	Pentandria, Monogynia
Thlaspi	Mithridate Mustard, or Treacle Mustard	Tetradynamia, Siliculosa
Thyralis		Decandria, Monogynia
Thuja	Arbor Vitæ	Monoecia, Monadelphia
Thymbra	Mountain Hyssop	Didynamia, Gymnosper.
Thymus	Thyme	Didynamia, Gymnosper.
Tiarella		Decandria, Digynia
Tilia	Lime Tree	Polyandria, Monogynia
Tillæa	Small Annual Houseleek	Tetrandria, Monogynia
Tillandsia		Hexandria, Monogynia
Tinus		Enneandria, Monogynia
Toluisera	Balsam of Tolu Tree	Decandria, Monogynia
Tomex		Tetrandria, Monogynia
Tordylium	Hartwort of Crete	Pentandria, Digynia
Torenia		Didynamia, Angiosp. r.
Tormentilla	Tormentil	Icosandria, Polygynia
Tournefortia		Pentandria, Monogynia

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GENERA.	ENGLISH NAMES.	CLASSES and ORDERS.
Tozzia		Didynamia, Angiosper.
Trachelium	Umbelliferous Throat-wort	Pentandria, Monogynia
Tradescantia	Virginian Spider-wort	Hexandria, Monogynia
Tragia		Monoecia, Triandria
Tragopogon	Goat's Beard	Syngenes. Polyg. æqua.
Trapa	Water Caltrops	Tetrandria, Monogynia
Tremella		Cryptogamia, Algæ
Trewia		Polyandria, Monogynia
Trianthema	Horse Purslane	Decandria, Monogynia
Tribulus	Caltrops	Decandria, Monogynia
Trichilia		Decandria, Monogynia
Trichomanes		Cryptogamia, Filices
Trichosanthes	Serpent Cucumber	Monoecia, Syngenesia
Trichostema		Didynamia, Gymnosper.
Tridax	Trailing Starwort of Vera Cruz	Syngenesia, Polygamia, superflua
Trientalis	Winter-green with Chickweed Flowers	Heptandria, Monogynia
Trifolium	Trefoil	Diadelphia, Decandria
Triglochin	Arrow-headed Grass	Hexandria, Trigynia
Trigonella	Fenugreek	Diadelphia, Decandria
Trillium	Herb Truelove of Canada	Hexandria, Trigynia
Trilix		Polyandria, Monogynia
Triopteris		Decandria, Trigynia
Trioiteum	Fever-Root, or False Ipecacuana	Pentandria, Monogynia
Triplaris		Triandria, Trigynia
Tripisacum		Monoecia, Triandria
Triticum	Wheat	Triandria, Digynia
Triumfetta		Dodecandria, Monogyn.
Trollius	Globe Ranunculus	Polyandria, Polygynia
Tropæolum	Indian Cress	Ostandria, Monogynia
Trophis		Dioecia, Tetrandria
Tulbagia		Hexandria, Monogynia
Tulipa	Tulip	Hexandria, Monogynia
Turnera		Pentandria, Trigynia
Turræa		Decandria, Monogynia
Turritis	Tower Mustard	Tetradynamia, Siliquosa
Tussilago	Colt's Foot	Syngenesia, Polyg. super.
Typha	Cat's-tail, or Reed Mace	Monoecia, Triandria

Vac-

GENERA ENGLISH NAMES. CLASSES and ORDERS.

V

Vaccinium	Whortle Berry	Ostandia, Monogynia
Valantia	Cross-wort	Polygamia, Monoecia
Valeriana	Valerian	Triandria, Monogynia
Vallisneria		Dioecia, Diandria
Vandellia		Didynamia, Angiosper.
Varronia		Pentandria, Monogynia
Vateria		Polyandria, Monogynia
Vatica		Dodecandria, Monogyn.
Velezia		Hexandria, Digynia
Vella	Spanish Cress	Tetradynamia, Sitticulosa
Veratrum	White Hellebore	Polygamia, Monoecia
Verbascum	Mullein	Pentandria, Monogynia
Verbena	Vervain	Diandria, Monogynia
Verbesina		Syngenesia, Polyg. super.
Veronica	Speedwell	Diandria, Monogynia
Viburnum	Pliant Mealy Tree, or Wayfaring Tree	Pentandria, Trigynia
Vicia	Vetch	Diadelphia, Decandria
Vinca	Periwinkle	Pentandria, Monogynia
Viola	Violet	Syngenesia, Monogamia
Viscum	Mistletoe	Dioecia, Tetrandria,
Vitex	Agnus Castus, or Chaste Tree	Didynamia, Angiosper.
Vitis	Vine	Pentandria, Monogynia
Ulex	Furze, Whins, or Gorse	Diadelphia, Decandria
Ulmus	Elm Tree	Pentandria, Digynia
Ulva	Laver	Cryptogamia, Algæ
Uniola	Sea-side Oats of Carolina	Triandria, Digynia
Volkameria		Didynamia, Angiosper.
Urena	Indian Mallow	Monodelphia, Polyandr.
Urtica	Nettle	Monoecia, Tetrandria
Utricularia	Water Milfoil	Decandria, Monogynia
Uvaria		Polyandria, Polygynia
Uvularia		Hexandria, Monogynia

W

Wachendorfia		Triandria, Monogynia
Waltheria		Monadelphia, Pentandr.
Weinmannia		Ostandia, Digynia
Willichia		Triandria, Monogynia
Winterania		Dodecandria, Monogyn.

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GENERA. ENGLISH NAMES. CLASSES and ORDERS.

X

Xanthium	Lesser Burdock	Monoecia, Pentandria
Xeranthemum	Austrian Sneezewort, or Eternal Flower	Syngenesia, Polyg. super- flua
Ximenesia		Ostendria, Monogynia
Xylophylla		Pentandria, Trigynia
Xylopia		Gynandria, Polyandria
Xyris		Tetrandria, Monogynia

Y

Yucca	Adam's Needle	Hexandria, Monogynia
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Z

Zamia		Cryptogamia, Filices
Zanichellia	Triple-headed Pond- weed	Monoecia, Monandria
Zanonia		Dioecia, Pentandria
Zanthoxylum	Tooth-ach Tree	Dioecia, Pentandria
Zea	Indian, or Turkey Wheat	Monoecia, Triandria
Zinnia		Syngenesia, Polyg. super.
Zizania		Monoecia, Hexandria
Ziziphora	Syrian Field Basil	Diandria, Monogynia
Zoegaea		Syngenesia, Polyg. frust.
Zostera	Grass-wrack	Gynandria, Polyandria
Zygophyllum	Bean Caper	Decandria, Monogynia

T A-

T A B L E II.

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
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A

<i>Abies, Tourn.</i>	Fir	<i>Pinus</i>
<i>Abrotanum, Tourn.</i>	Southern Wood	<i>Artemisia</i>
<i>Abfinthium, Tourn. & Vaill. A. G.</i>	Wormwood	<i>Artemisia</i>
<i>Abutilon, Dill. Elth. & Tourn.</i>	Indian Mallow	<i>Sida</i>
<i>Abutilon, Dill. Elth.</i>	Carolina Mallow	<i>Malva</i>
<i>Acacia, Tourn.</i>		<i>Mimosa</i>
<i>Acajou, Tourn.</i>	Cashew Nut	<i>Anacardium</i>
<i>Acarna, Vaill. A. G.</i>	Blessed Thistle	<i>Cnicus</i>
<i>Acetosa, Tourn.</i>	Sorrel	<i>Rumex</i>
<i>Achyraantha, Dill. Elth.</i>		<i>Achyranthes</i>
<i>Achyronia, Royen.</i>	African Broom	<i>Aspalathus</i>
<i>Achyrophorus, Vaill. A. G.</i>		<i>Hypochaeris</i>
<i>Acinodendron, Lin. gen. pl. ed. prim.</i>	American Gooseberry	<i>Melastoma</i>
<i>Acinos, Dill. gen.</i>	Wild, or Stone Basil	<i>Thymus</i>
<i>Acnide, Mitch.</i>		<i>Acnida</i>
<i>Adhatoda, Tourn.</i>	Malabar Nut	<i>Jussia</i>
<i>Ægilops, Dill. gen.</i>	Oat Grass	<i>Bromus</i>
<i>Ageratum, Tourn.</i>		<i>Erinus</i>
<i>Agnanthus, Vaill. A. G.</i>		<i>Cornutia</i>
<i>Agrimonoïdes, Tourn.</i>	Bastard Agrimony	<i>Agrimonia</i>
<i>Ahouai, Tourn.</i>		<i>Cerbera</i>
<i>Alaternus, Tourn.</i>	False Phyllyrea	<i>Rhamnus</i>
<i>Alcea, Tourn.</i>	Vervain Mallow	<i>Malva</i>
<i>Alchimilla, Tourn.</i>	Ladies Mantle	<i>Alchemilla</i>
<i>Alga, Raj. Ang.</i>	Grass-wrack	<i>Zostera</i>
<i>Algoides, Vaill. A. G.</i>		<i>Zannichellia</i>
<i>Alhagi, Tourn.</i>	French Honeyfuckle	<i>Hedysarum</i>
<i>Alkekengi, Tourn.</i>	Winter Cherry	<i>Physalis</i>
<i>Alnus, Tourn.</i>	Alder	<i>Betula</i>
<i>Aloides, Boer. Lugd.</i>	Water Soldier	<i>Stratiotes</i>
<i>Alpina, Plum.</i>		<i>Alpinia</i>
<i>Alfinatrum, Vaill. B. P.</i>		<i>Elatine</i>
		Alfine,

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
<i>Alfne, Tourn.</i>	Great Chickweed	<i>Stellaria</i>
<i>Alfinella, Dill. gen.</i>		<i>Sagina</i>
<i>Alfinoides, Raj.</i>		<i>Bufonia</i>
<i>Alfinoides, Vaill. B. P.</i>		<i>Montia</i>
<i>Alypum, Niss. A. G.</i>	Blue Daisy	<i>Globularia</i>
<i>Alyssoides, Tourn.</i>	Madwort	<i>Alyssum</i>
<i>Amanita, Dill.</i>	Agaric	<i>Agaricus</i>
<i>Amaranthi species, Tourn.</i>		<i>Amaranthus</i>
<i>Amaranthoides, Tourn.</i>	Globe Amaranth	<i>Gomphrena</i>
<i>Amberboi, Vaill.</i>	Sweet oriental Cyanus, called Sweet Sultan	<i>Centaurea</i>
<i>Amethysina, Amman. & Hall.</i>		<i>Amethystea</i>
<i>Ammoides, Boerb.</i>	Bishop's Weed	<i>Ammi</i>
<i>Ampana, Hort. Mal.</i>	Malabar Palm (Male)	<i>Borassus</i>
<i>Anacampteros, Tourn.</i>	Orpine	<i>Sedum</i>
<i>Anacampteros, Lin. gen. pl. edit. prim.</i>	Evergreen African Pur- flane	<i>Portulaca</i>
<i>Anagallidastrium, Mich.</i>		<i>Centunculus</i>
<i>Ananas, Tourn.</i>	Pine Apple	<i>Bromelia</i>
<i>Ananthocyclos, Vaill. A. G. & Dill. Elib.</i>		<i>Cotula</i>
<i>Anapodophyllum, Tourn.</i>	Duck's Foot, or May Apple	<i>Podophyllum</i>
<i>Androsæmum, Tourn.</i>	Tutfan, or Park Leaves	<i>Hypericum</i>
<i>Anemone ranunculus, Dill. gen.</i>	Wind Flower	<i>Anemone</i>
<i>Anemonoides, Dill. gen. & Vaill. A. G.</i>	Wood Anemone	<i>Anemone</i>
<i>Anemonospermus, Com. Hort. Amst.</i>		<i>Arctotis</i>
<i>Angiopteris, Mitch.</i>		<i>Onoclea</i>
<i>Anguina, Trew.</i>	Water Dragons	<i>Calla</i>
<i>Anguina, Mich.</i>	Serpent Cucumber	<i>Trichosanthes</i>
<i>Anguria, Tourn.</i>	Water Melon	<i>Cucurbita</i>
<i>Anonis, Tourn.</i>	Restharrow	<i>Ononis</i>
<i>Anonymos, Gron. virg.</i>		<i>Chelone</i>
<i>Antanifophyllum, Vaill. A. G.</i>	Hogweed	<i>Boerhaavia</i>
<i>Anthyllis, Magn. char.</i>		<i>Cressa</i>
<i>Aparine, Tourn.</i>	Clivers, or Goose Grass	<i>Galium</i>
<i>Aphaca, Tourn.</i>	Yellow Vetchling	<i>Lathyrus</i>
		<i>Aphyl-</i>

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
<i>Aphyllon, Mich.</i>	Single flowered Broom Rape	<i>Orobanche</i>
<i>Apios, Boerb.</i>	Knobbed-rooted Liquorice Vetch	<i>Glycine</i>
<i>Apocynum, Tourn.</i>	Dog's Bane	<i>Asclepias</i>
<i>Aponogeton, Pont. Anth.</i>	Triple Headed Pond-weed	<i>Zanichellia</i>
<i>Aquifolium, Tourn.</i>	Holly	<i>Ilex</i>
<i>Arachidna, Plumb.</i>	Ground Nut	<i>Arachis</i>
<i>Arachidnoides, Niss. A. G.</i>	Ground Nut	<i>Arachis</i>
<i>Araliastrum, Vaill.</i>	Ginseng	<i>Panax</i>
<i>Arapabaca, Plum.</i>	Worm Grass	<i>Spigelia</i>
<i>Arctotheca, Vaill. A. G.</i>		<i>Arctotis</i>
<i>Arifarum, Tourn.</i>	Friar's Cowl	<i>Arum</i>
<i>Armeniaca, Tourn.</i>	Apricot	<i>Prunus</i>
<i>Aronia, Mitch.</i>	Floating Arum	<i>Orontium</i>
<i>Aruncus, Lin. gen. pl. ed. prim.</i>	Greater Meadow Sweet	<i>Spiræa</i>
<i>Asarina, Tourn.</i>	Snapdragon, with Ground Ivy Leaves	<i>Antirrhinum</i>
<i>Ascyrum, Tourn.</i>	St. Peter's Wort, with great Flowers	<i>Hypericum</i>
<i>Aspergillus, Mich.</i>		<i>Byssus</i>
<i>Asteriscus, Dill. Eltb.</i>	Bastard Chrysanthemum	<i>Silphium</i>
<i>Asteriscus, Tourn. Vaill. A. G. & Dill. Eltb.</i>	Ox Eye	<i>Bupththalmum</i>
<i>Asterocephalus, Vaill. A. G.</i>	Scabious	<i>Scabiosa</i>
<i>Asteroides, Tourn. & Vaill. A. G.</i>	Ox Eye	<i>Bupththalmum</i>
<i>Asteropterus, Vaill. A. G.</i>	Star-wort	<i>Aster</i>
<i>Astragaloides, Tourn.</i>	Bastard Milkvetch	<i>Phaca</i>
<i>Atractylis, Vaill. A. G.</i>	Distaff Thistle	<i>Carthamus</i>
<i>Aurantium, Tourn.</i>	Orange	<i>Citrus</i>
<i>Aureliana, Lafit.</i>	Ginseng	<i>Panax</i>
<i>Auricula, Urst, Tourn.</i>	Auricula, or Bear's Ear	<i>Primula</i>
<i>Azederach, Tourn.</i>	Bead Tree	<i>Melia</i>
B		
<i>Baccharis, Vaill. A. G.</i>	Lavender Cotton	<i>Santolina</i>
		Bad.

T A B L E I.

303

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LYNNÆAN GENERA.
Badiaga, <i>Buxb.</i>	River Sponge	Spongia
Ballote, <i>Tourn.</i>	Black Horehound	Ballota
Balsamina, <i>Tourn.</i>	Balsam	Impatiens
Balsamita, <i>Vaill. A. G.</i>	Costmary	Tanacetum
Barba capræ, <i>Tourn.</i>	Greater Meadowsweet	Spiræa
Belladonna, <i>Tourn.</i>	Deadly Nightshade	Atropa
Bellidiastrum, <i>Mich.</i>	Middle Daisy	Doronicum
Bellidioides, <i>Vaill. A. G.</i>	Greater, or Ox-eye Daisy	Chrysanthemum
Bellis-Leucanthemum, <i>Mich. gen.</i>	Annual Daisy	Bellis
Benzoe, <i>Boerb.</i>	Benjamin Tree	Laurus
Bermudiana, <i>Tourn. & Dill. Elb.</i>		Sisyrinchium
Bernhardia, <i>Houft. A. A.</i>	Bastard Ricinus	Croton
Bidentis species, <i>Dill. Elb.</i>	Tick-seeded Sun-flower	Coreopsis
Bihai, <i>Plum.</i>	Banana	Musa
Bistorta, <i>Tourn.</i>	Bistort, or Snakeweed	Polygonum
Blairia, <i>Houft. A. A.</i>	Vervain	Verbena
Blattaria, <i>Tourn.</i>	Moth Mullein	Verbascum
Boletus, <i>Mich.</i>		Phallus
Bonarota, <i>Mich.</i>	Rock Germander	Veronica
Bonduc, <i>Plum.</i>	Nickar Tree	Guilandina
Boraginoides, <i>Boerb.</i>	Indian Borrage	Borrage
Borbonia, <i>Plum.</i>	Red Bay of Carolina	Laurus
Botrytis, <i>Mich.</i>		Byssus
Bovista, <i>Dill.</i>		Lycoperdon
Bryonioides, <i>Dill. Elb.</i>	Single-seeded Cucumber	Sicyos
Bucca-ferrea, <i>Mich.</i>		Ruppia
Buglossum, <i>Tourn.</i>	Bugloss	Anchusa
Bugula, <i>Tourn.</i>	Bugle	Ajuga
Bulbine, <i>Lin. gen. pl. Ed. prim.</i>	Cape Spider-wort	Anthericum
Bulbocastanum, <i>Tourn.</i>	Pig-nut, or Earth-nut	Bunium
Bupthalmum, <i>Tourn.</i>	Ox-eye of old Authors	Anthemis
Bupleuroides, <i>Boerb.</i>	Bastard Hare's-ear	Phyllis
Bursa Pastoris, <i>Tourn.</i>	Shepherd's Pouch	Thlaspi

C

Caapeba, *Plumb.*

Cissampelos
Ca-

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
<i>Cacalanthemum, Dill.</i> <i>Elb.</i>		<i>Cacalia</i>
<i>Cacao, Tourn.</i>	Chocolate Nut	<i>Theobroma</i>
<i>Cainito, Plum.</i>	Star Apple	<i>Chrysophyl- lum</i>
<i>Calaba, Plum.</i>		<i>Calophyllum</i>
<i>Calamintha, Tourn.</i>	Calamint	<i>Melissa</i>
<i>Calamus aromaticus, Pet. gen. & Mich.</i>	Sweet Rush	<i>Acorus</i>
<i>Calceolus, Tourn.</i>	Ladies Slipper	<i>Cypripedium</i>
<i>Calcitrapa, Vaill.</i>	Star Thistle	<i>Centaurea</i>
<i>Calcitrapoides, Vaill.</i>	Thorny Knapweed	<i>Centaurea</i>
<i>Caltha, Tourn. & Vaill.</i>	Marigold	<i>Calendula</i>
A. G.		
<i>Camara, Plum. & Dill.</i> <i>Elb.</i>	American Viburnum	<i>Lantana</i>
<i>Cameraria, Dill. gen.</i>	Small Water Chickweed, or Blinks	<i>Montia</i>
<i>Camphora, Gronov. diff.</i>	Camphire Tree	<i>Laurus</i>
<i>Camphorata, Tourn.</i>	Stinking Ground Pine	<i>Camphoros- ma</i>
<i>Cannabina, Tourn. cor.</i>	Bastard Hemp	<i>Datisca</i>
<i>Cannacorus, Tourn.</i>	Indian Flowering Reed	<i>Canna</i>
<i>Capnoides, Tourn.</i>	Fumatory	<i>Fumaria</i>
<i>Caprifolium, Tourn.</i>	Honey-suckle	<i>Lonicera</i>
<i>Caprificus, Pent. Antib.</i>	Wild Fig-tree	<i>Ficus</i>
<i>Caraguata, Plum.</i>		<i>Tillandsia</i>
<i>Caraxeron, Vaill. A. G.</i>	Globe Amaranth	<i>Gomphrens</i>
<i>Cardamindum, Tourn.</i>	Indian Cress	<i>Tropæolum</i>
<i>Cardiaca, Tourn.</i>	Mother-wort	<i>Leonurus</i>
<i>Cardispermum, Trant.</i> A. G.	Marigold	<i>Calendula</i>
<i>Cardui species, Tourn.</i>	Woolly Thistle	<i>Onopordum</i>
<i>Carelia, Pont. diff.</i>	Bastard Hemp Agrimony	<i>Ageratum</i>
<i>Carimpana, Hort. Mal.</i>	Malabar Palm (Female)	<i>Borassus</i>
<i>Carlinoides, Vaill. A. G.</i>	Carline Thistle	<i>Carlina</i>
<i>Carpobolus, Mich.</i>		<i>Lycoperdon</i>
<i>Carthamoides, Vaill. A. G.</i>	Bastard Saffron	<i>Carthamus</i>
<i>Carui, Tourn.</i>	Caraway	<i>Carum</i>
<i>Caryophyllata, Tourn.</i>	Avens, or Herb Bennet	<i>Geum</i>
<i>Caryophyllodendron, Vaill. A. G.</i>	Clove-tree	<i>Caryophyllus</i>
		Cary-

T A B L E II.

305

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
<i>Caryophyllus, Tourn.</i>	Pink, Clove July Flower, Sweet William, &c.	<i>Dianthus</i>
<i>Caryophyllus, aromati- cus, Tourn.</i>	Clove Tree	<i>Caryophyllus</i>
<i>Casia, Tourn.</i>	Poet's Cassia	<i>Osyris</i>
<i>Cassida, Tourn.</i>	Skull-Cap	<i>Scutellaria</i>
<i>Castanea, Tourn.</i>	Chestnut	<i>Fagus</i>
<i>Castorea, Plum.</i>		<i>Duranta</i>
<i>Catanance, Tourn.</i>	Candy Lion's Foot	<i>Catananche</i>
<i>Cataria, Tourn.</i>	Catmint	<i>Nepeta</i>
<i>Cedrus, Tourn.</i>	Cedar	<i>Juniperus</i>
<i>Ceiba, Plum.</i>	Silk Cotton Tree	<i>Bombax</i>
<i>Centaureum majus, Tour.</i>	Centaury	<i>Centaurea</i>
<i>Centaureum minus, Tour.</i>	Lesser Centaury	<i>Gentiana</i>
<i>Cepa, Tourn.</i>	Onion	<i>Allium</i>
<i>Cerasus, Tourn.</i>	Cherry	<i>Prunus</i>
<i>Ceratocephaloides, Vaill.</i>		<i>Verbesina</i>
A. G.		
<i>Ceratocephalus, Vaill.</i>		<i>Bidens</i>
A. G.		
<i>Ceratoides, Tourn. Cor.</i>		<i>Axyris</i>
<i>Cereus, Juss. A. G.</i>	Torch Thistle	<i>Cactus</i>
<i>Cerinthoides, Boerb.</i>	Honey-wort	<i>Cerinth</i>
<i>Cervispina, Dill. gen.</i>	Buckthorn	<i>Rhamnus</i>
<i>Chærophylli species Tour</i>	Wild Chervil	<i>Chærophyll- um</i>
<i>Chamæbuxus, Tourn.</i>	Low Box	<i>Polygala</i>
<i>Chamæcerasus, Tourn.</i>	Dwarf Cherry, or Up- right Honeyfuckle	<i>Lonicera</i>
<i>Chamædaphne, Buxb.</i>		<i>Andromeda</i>
A. R.		
<i>Chamædaphne, Mitch.</i>		<i>Mitchella</i>
<i>Chamædryas, Tourn.</i>	Germander	<i>Teucrium</i>
<i>Chamæjasme, Amn.</i>		<i>Steilera</i>
<i>Chamælea, Tourn.</i>	Widow Wail	<i>Cneorum</i>
<i>Chamælinum, Vaill. B.P.</i>	Least Rupture-wort, or All-seed	<i>Linum</i>
<i>Chamæmelum, Tourn. & Vaill. A. G.</i>	Chamomile	<i>Anthemis</i>
<i>Chamænerion, Tourn.</i>	Rosebay Willow Herb	<i>Epilobium</i>
<i>Chamæpitys, Tourn.</i>	Ground Pine	<i>Teucrium</i>
	X	Cha-

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN- GENERA.
<i>Chamærhododendros, Tourn.</i>	Dwarf Rosebay	<i>Rhododendron</i>
<i>Chamæriphe, Pont.</i>	Dwarf Palm	<i>Chamærops</i>
<i>Chenopodium-morus, Boer</i>	Strawberry Spinach, or Blite	<i>Blitum</i>
<i>Christophoriana, Tourn.</i>	Herb Christopher	<i>Actæa</i>
<i>Chrysanthemoides, Tour. A. G. Dill. Gen. & Elth.</i>	Hard-seeded Chrysanthemum	<i>Osteospermum</i>
<i>Chrylocome, Dill. gen.</i>	Goldy Locks	<i>Chrysocoma</i>
<i>Cicuta, Tourn.</i>	Hemlock	<i>Conium</i>
<i>Cicutaria, Tourn.</i>	Great broad-leaved Bardsard Hemlock	<i>Ligusticum</i>
<i>Cinara, Tourn.</i>	Artichoke	<i>Cynara</i>
<i>Cinnamomum, Herm. H. L. B. & Burm. Zeyl.</i>	Cinnamon Tree	<i>Laurus</i>
<i>Cirsium, Tourn. & Vaill. A. G.</i>	Soft or Gentle Thistle	<i>Carduus</i>
<i>Citreum, Tourn.</i>	Citron	<i>Citrus</i>
<i>Clandestina, Tourn.</i>	Broom Rape with great Purple Flowers, or great Purple Herb-bane	<i>Lathræa</i>
<i>Clematitis, Tourn.</i>	Virgin's Bower	<i>Clematis</i>
<i>Clitorius, Dill. Elth.</i>		<i>Clitoria</i>
<i>Clymenum, Tourn.</i>	Chichling Vetch	<i>Lathyrus</i>
<i>Coa, Plum.</i>		<i>Hippocratea</i>
<i>Codda Panna, Hort. Mal.</i>		<i>Corypha</i>
<i>Coffe, Juss. A. G.</i>	Coffee Tree	<i>Coffea</i>
<i>Colocalia, Boerb.</i>	Great Egyptian Arum	<i>Arum</i>
<i>Colocynthis, Tourn.</i>	Coloquintida, or Bitter Gourd	<i>Cucumis</i>
<i>Coma aurea, Boerb.</i>	Goldy Locks	<i>Chrysocoma</i>
<i>Conocarpodendron, Boer</i>	Silver Tree	<i>Protea</i>
<i>Convolvulo Tithymalus, Boerb.</i>		<i>Dalechampia</i>
<i>Conyzella, Dill. Gen.</i>		<i>Erigeron</i>
<i>Conyzoides, Dill. Gen.</i>		<i>Erigeron</i>
<i>Conyzoides, Tourn. A. G.</i>		<i>Carpesium</i>
<i>Coral, Dill. Elth.</i>	Coral Tree	<i>Erythrina</i>
<i>Corallo fungus, Vaill. B. P.</i>		<i>Clavaria</i>
<i>Corallodendron, Tourn.</i>	Coral Tree	<i>Erythrina</i>

T A B L E II.

307

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
<i>Coralloides, Tour. & Mich.</i>		Clavaria
<i>Coralloides, Dill. Musc.</i>	Liverwort	Lichen
<i>Cordylina, Roy. Lugd.</i>	Adam's Needle	Yucca
<i>Corindum, Tourn.</i>	Heart-feed, or Heart-pea	Cardiospermum
<i>Cornucopioides, Scheuch.</i>		Cornucopieæ
<i>Corona imperialis, Tourn.</i>	Crown Imperial	Fritillaria
<i>Corona solis, Vaill. A. G.</i>	Sun-flower	Helianthus
<i>Tourn. & Dill. Elth.</i>		
<i>Coronopus, Tourn.</i>	Buck's-horn Plantain	Plantago
<i>Corrigiola, Dill. gen. & Mæbr.</i>	Verticillate Knot-grass	Illecebrum
<i>Cortusa, Plum.</i>		Thalia
<i>Corydalis, Dill. gen.</i>	Bladder Fumatory	Fumaria
<i>Cotinus, Tourn.</i>	Venice Sumach	Rhus
<i>Cotula, Tourn.</i>		Anacyclus
<i>Courbaril, Plum.</i>	Locust Tree	Hymenæa
<i>Crepis, Vaill. A. G.</i>	Tangier Sow Thistle	Scorzonera
<i>Crocodilium, Vaill.</i>	Centaury without Stems	Centaurea
<i>Crocodilodes, Vaill.</i>	Distaff Thistle	Atractylis
<i>Cruciata, Tourn.</i>	Cross-wort	Valantia
<i>Cucularia, Juss. A. G.</i>	Fumatory with a naked Stalk	Fumaria
<i>Cujete, Plum.</i>	Calabash Tree	Crescentia
<i>Cuminoides, Tourn.</i>	Wild or Bastard Cumin	Lagoecia
<i>Cururu, Plum.</i>		Paullinia
<i>Cyanus, Tourn. & Vaill. A. G.</i>	Blue Bottle	Centaurea
<i>Cyathoides, Mich.</i>	Cup Mushroom	Peziza
<i>Cydonia, Tourn.</i>	Quince Tree	Pyrus
<i>Cynocrambe, Tourn.</i>	Dog's Cabbage	Theligonum
<i>Cynoglossoides, Isnard. A. G.</i>	Borrage	Borrago
<i>Cynomorium, Garc.</i>		Cynometra
<i>Cynorrhinchium, Mitch.</i>		Mimulus
<i>Cyperella, Mich.</i>		Schœnus
<i>Cyperoides, Tour. Scheuch. & Mich.</i>		Carex
<i>Cysticapnos, Berber.</i>	Bladder Fumatory	Fumaria

D

Dalea, Lin. gen. pl. Ed. prim.

X 2

Pforalia

Da-

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Damasonium, <i>Tourn.</i> & <i>Vaill.</i> A. G.	Star-headed Water-Plantain	Alisma
Dantia, <i>Petit. gen.</i>		Isnardia
Dens Canis, <i>Tourn.</i>	Dog's Tooth Violet	Erythronium
Dens Leonis, <i>Tourn.</i>	Dandelion	Leontodon
Dichotophyllum, <i>Dill. gen.</i>		Ceratophyllum
Diconangia, <i>Mich.</i>		Itea
Dimorphothecca, <i>Vaill.</i> A. G.	Marigold	Calendula
Diothecca, <i>Vaill.</i> A. G.		Morina
Dodonæa, <i>Plum.</i>	Holly with wing'd Leaves	Ilex
Doria, <i>Dill. gen.</i> & <i>Elb.</i>	Golden Rod	Solidago
Dortmanna, <i>Rudb.</i> A. S.	Water Gladiole	Lobelia
Dracunculoides, <i>Boerb.</i>	Blood Flower	Hæmanthus
Dracunculus, <i>Tourn.</i>	Dragons	Arum
Duglassia, <i>Houft.</i> A. A.		Volkameria
E		
Echinopus, <i>Tourn.</i> & <i>Vaill.</i> A. G.	Globe Thistle	Echinops
Echinoides, <i>Dill. gen.</i>		Lycopsis
Elate, <i>Muf. Cliff.</i>	Common Palm, or Date Tree	Phoenix
Elaterium, <i>Boerb.</i>	Wild, Spirting, or Asses Cucumber	Momordica
Elatine, <i>Dill. gen.</i>	Fluellin, or Female Speedwell	Antirrhinum
Elephas, <i>Tourn.</i>	Elephant's Head	Rhinanthus
Elichrysum, <i>Tourn.</i> & <i>Dill. Elb.</i>	Cassidony, Goldyllocks, or Eternal Flower	Gnaphalium
Elymus, <i>Mitch.</i>		Zizania
Emerus, <i>Tourn.</i>	Scorpion Senna	Coronilla
Enula, <i>Cæsa'p. & Magnol.</i>	Elecampane	Inula
Ephemerum, <i>Tourn.</i>	Virginian Spiderwort	Tradescantia
Erebinthus, <i>Mitch.</i>		Cracca
Eresia, <i>Plum.</i>		Theophrasta
Ericæ species, <i>Tourn.</i>		Andromeda
Erinacea, <i>Tourn.</i>	Spanish Hedge hog Thorn	Anthyllis
Erinaceus, <i>Dill. & Mich.</i>		Hydnum
		Erio

T A B L E II.

309

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
<i>Eriocephalus</i> , <i>Vaill.</i> A. G.	Spear Thistle	<i>Carduus</i>
<i>Eriophorus</i> , <i>Vaill.</i> A. G.	Downy Sow Thistle, or Woolly Hawkweed	<i>Andryala</i>
<i>Erucago</i> , <i>Tourn.</i>	Square-codded Rocket of Montpelier	<i>Bunias</i>
<i>Euonymoides</i> , <i>Jsnar.</i> A. G.	Staff Tree	<i>Celastrus</i>
<i>Eupatoriophalacron</i> , <i>Dill</i> <i>Elth. & Vaill.</i> A. G.		<i>Verbefina</i>
<i>Euphorbium</i> , <i>Jsnar.</i> A. G.	Burning Thorny Plant	<i>Euphorbia</i>

F

<i>Faba</i> , <i>Tourn.</i>	Bean	<i>Vicia</i>
<i>Fabago</i> , <i>Tourn.</i>	Bean Caper	<i>Zygophyl- lum</i>
<i>Fagopyrum</i> , <i>Tourn.</i>	Buck Wheat, or Brank	<i>Polygonum</i>
<i>Ferrum equinum</i> , <i>Tourn.</i>	Horshoe Vetch	<i>Hippocrepis</i>
<i>Ficaria</i> , <i>Dill. gen.</i>	Pilewort, or Lesser Ce- landine	<i>Ranunculus</i>
<i>Ficoida</i> , <i>Niff.</i> A. G. <i>Dill. gen. & Elth.</i>		<i>Aizoon</i>
<i>Ficoides</i> , <i>Tourn.</i> A. G.	Fig Marigold	<i>Mesembryan- themum</i>
<i>Filago</i> , <i>Vaill.</i> A. G. & <i>Tourn.</i>	Cudweed	<i>Gnaphalium</i>
<i>Filipendula</i> , <i>Tourn.</i>	Dropwort	<i>Spiræa</i>
<i>Fluvialis</i> , <i>Vaill.</i> A. G. & <i>Mich.</i>		<i>Naias</i>
<i>Fœniculum</i> , <i>Tourn.</i>	Fennel	<i>Anethum</i>
<i>Fœnum græcum</i> , <i>Tourn.</i>	Fenugreek	<i>Trigonella</i>
<i>Franca</i> , <i>Mich.</i>		<i>Frankenia</i>
<i>Frangula</i> , <i>Tourn.</i>	Black, or Berry-bearing Alder	<i>Rhamnus</i>
<i>Fungoidaster</i> , <i>Mich.</i>		<i>Elvela</i>
<i>Fungoides</i> , <i>Mich.</i>		<i>Elvela</i>
<i>Fungoides</i> , <i>Dill.</i>		<i>Clavaria</i>
<i>Fungoidis species</i> , <i>Vaill.</i>	Cup Mushroom	<i>Peziza</i>
B. P.		
<i>Fungoidis species</i> , <i>Vaill.</i>		<i>Elvela</i>
B. P.		

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
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G

Gale, <i>Tourn. A. G. & Dill. gen.</i>	Sweet Willow, Gale, or Dutch Myrtle	Myrica
Galeobdolon, <i>Dill. gen.</i>	Yellow Archangel, or dead Nettle	Galeopsis
Galeopsis, <i>Tourn.</i>	Base Horehound	Stachys
Gallium, <i>Tourn.</i>	Ladies Bed straw, or Cheese Renet	Galium
Gaster, <i>Mich.</i>		Lycoperdon
Genista, <i>Tourn.</i>	Broom	Spartium
Genista-spartium, <i>Tourn.</i>	Furze, Whins, or Gorse	Ulex
Genistella, <i>Tourn.</i>	Dwarf Broom	Genista
Gerbera, <i>Lin. gen. pl. Ed. prim.</i>		Arnica
Gesnera, <i>Plum.</i>		Gesneria
Geum, <i>Tourn.</i>	Kidney-wort	Saxifraga
Glaucium, <i>Tourn.</i>	Horned Poppy	Chelidonium
Glaucoides, <i>Mich.</i>	Water Purslane	Peplis
Gnaphaloides, <i>Tourn.</i>	Bastard Cudweed	Micropus
Graminifolia, <i>Dill. gen.</i>	Triple-headed Pond-weed	Zannichellia
Granadilla, <i>Tourn. & Dill. Elb.</i>	Passion Flower	Passiflora
Grossularia, <i>Tourn.</i>	Gooseberry	Ribes
Guaicana, <i>Tourn.</i>	Indian Date Plum	Diospyros
Guaiaava, <i>Tourn.</i>	Bay Plum	Psidium
Guanabanus, <i>Plum.</i>	Custard Apple	Annona
Guazuma, <i>Plum.</i>	Bastard Cedar of Jamaica	Theobroma
Guidonia, <i>Plum.</i>		Samyda

H

Hacub, <i>Vaill. A. G.</i>		Gundelia
Harmala, <i>Tourn.</i>	Wild Syrian Rue	Peganum
Hedypnois, <i>Tourn.</i>		Hyoferis
Heisteria, <i>Lin. gen. pl. Ed. prim.</i>		Polygala
Heleniastrum, <i>Vaill. A. G.</i>	Bastard Sun-flower	Helenia
Helenium, <i>Vaill. A. G.</i>	Starwort	Alter
		Hale-

T A B L E II.

311

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Helenium, <i>Merisf. Raj.</i> <i>Herm. Rivin. Rupp.</i> <i>Knaut. & Vaill.</i>	Elecampane	Inula
Helianthemum, <i>Tourn.</i>	Dwarf Cistus, or Little Sunflower	Cistus
Helichrysoides, <i>Vaill. A.</i> P.		Seriphium
Helichrysoides, <i>Vaill. A.</i> G.		Gnaphalium
Helichrysum, <i>Vaill. A. G.</i>	Cassidony, Goldyllocks, or Eternal Flower	Gnaphalium
Helleborine, <i>Tourn.</i>	Bastard Hellebore	Serapias
Helmintothea, <i>Vaill. A.</i> G.		Picris
Helxine, <i>Lin. gen. pl. Ed.</i>	Buckwheat, or Brank <i>prim.</i>	Polygonum
Henna, <i>Ludw.</i>		Lawsonia
Hepatica, <i>Dill. gen.</i>	Noble Liverwort, or He- patica	Anemone
Hepatica, <i>Mieb.</i>		Marchantia
Herba Paris, <i>Tourn.</i>	True-love, or One-berry	Paris
Hermodactylus, <i>Tourn.</i>	Tuberoſe Iris	Iris
Hieracioides, <i>Vaill. A. G.</i>	Bastard Hawkweed	Crepis
Hippocastanum, <i>Tourn.</i>	Horse Chestnut	Æſculus
Hippuris, <i>Dill. gen. &</i> <i>Pont. Anth.</i>		Chara
Horminum, <i>Tourn.</i>	Clary	Salvia
Hyacinthus ſtellaris, <i>Raj.</i>	Star Hyacinth	Scilla
<i>Meth.</i>		
Hydroceratophyllon, <i>Vaill. A. G.</i>		Ceratophyl- lum
Hydrophace, <i>Buxb. cent.</i>	Duck Meat	Lemna
Hypericoides, <i>Plum.</i>	St. Peter's Wort	Aſcyrum
Hypocistis, <i>Tourn.</i>	Rape of Cistus	Aſarum
Hypophyllocarpoden- dron, <i>Boerb.</i>		Leucaden- dron
Hypopitys, <i>Dill. gen.</i>		Monotropa
Hysterophorus, <i>Vail. A. G.</i>	Bastard Feverfew	Parthenium

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
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I

Jabotapita, <i>Plum.</i>		Ochna
Jacea, <i>Tourn. Dill. gen. & Vaill.</i>	Knapweed	Centaurea
Jacobææ species, <i>Tourn. Vaill. A. G.</i>	Ragworts, (sundry of old Authors)	Solidago
Jacobææ species, <i>Tourn.</i>	Ragworts, (sundry of old Authors)	Senecio
Jacobæastrum, <i>Vail. A. G.</i>	African Ragwort	Othonna
Jacobæoides, <i>Vail. A. G.</i>	African Ragwort	Othonna
Jalapa, <i>Tourn.</i>	Marvel of Peru	Mirabilis
Jan-rajá, <i>Plum.</i>		Rajania
Jasminoides, <i>Niff. A. G.</i>	Bastard Jasmine	Lycium
Icaco, <i>Plum.</i>	Cocoa Plum	Chrysobalanus
Ilex, <i>Tourn.</i>	Evergreen Oak	Quercus
Indigo, <i>Isnard. A. G.</i>	Goat's Rue	Galega
Inga, <i>Plum.</i>		Mimosa
Jonthiaspi, <i>Tourn.</i>	Treacle Mustard	Clypeola
Isora, <i>Plum.</i>	Skrew Tree	Helicteres
Juncago, <i>Tourn. & Mich.</i>	Arrow-headed Grass	Triglochin
Jussievia, <i>Houff. A. A.</i>		Jatropha

K

Kali, <i>Tourn.</i>	Glass-wort	Salsola
Karatas, <i>Plum.</i>	Pine Apple	Bromelia
Katovindel, <i>Hort. Mal.</i>	Palm, or Date Tree	Phoenix
Kæmpfera, <i>Houff. A. A.</i>	Vervain	Verbena
Keratophyton, <i>Boerb.</i>		Lithoxylum
Ketmia, <i>Tourn.</i>	Althæa Frutex, or Syrian Mallow	Hibiscus
Kleinia, <i>Lin. gen. pl. ed. prim.</i>	Foreign Colt's Foot	Cacalia
Knawel, <i>Dill. gen.</i>	German Knot Grass	Scleranthus
Kodda-pail, <i>Plum.</i>	Water Houseleek of Egypt	Pistia

L

Lacryma Job. <i>Tourn.</i>	Job's Tears	Coix
		Lam-

T A B L E II.

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Lampfana, <i>Vaill.</i> A. G.	Nipplewort	Lapfana
Lancifia, <i>Pont. diff.</i>		Cotula
Lapathum, <i>Tourn.</i>	Dock	Rumex
Lappa, <i>Tourn. & Vaill.</i>	Burdock	Arctium
A. G.		
Larix, <i>Tourn.</i>	Larch Tree	Pinus
Laurentia, <i>Mich.</i>		Lobelia
Lauro-cerasus, <i>Tourn.</i>	Laurel	Prunus
Ledum, <i>Mich.</i>		Andromeda
Lens, <i>Tourn.</i>	Lentils	Ervum
Lentibularia, <i>Vaill.</i> A.	Water Milfoil	Utricularia
G. & Dill. <i>gen.</i>		
Lenticula, <i>Mich. & Dill.</i>	Duck Meat	Lemna
<i>gen.</i>		
Leontodontoides, <i>Mich.</i>		Hyoseris
<i>gen.</i>		
Leontopetalon, <i>Tourn.</i>	Lion's Leaf	Leontice
Lepidocarpodendron,		Leucaden-
<i>Boerb.</i>		dron
Leptostachia, <i>Mich.</i>		Phryma
Leucanthemum, <i>Tourn.</i>	Chrysanthemum with white Rays, or Ox- Eye Daisy	Chrysanthemum
Leucojum, <i>Tourn.</i>	Stock July Flower, and Wall Flower	Cheiranthus
Lichen, <i>Dill. Musc.</i>		Marchantia
Lichenastrum, <i>Dill. Musc.</i>		Jungerman- nia
Lichenoides, <i>Dill. Musc.</i>		Lichen
Lilac, <i>Tourn.</i>	Lilac, or Pipe Tree	Syringa
Liliastrum, <i>Tourn.</i>	White Day Lily, St. Bruno's Lily, or Great Savoy Spider-wort	Hemerocallis
Lilio-asphodelus, <i>Tourn.</i>	Day Lily, or Lily As- phodel	Hemerocallis
Lilio-hyacinthus, <i>Tourn.</i>	Lily-Hyacinth	Scilla
Lilio-narcissus, <i>Tourn.</i>	Lily-Daffodil	Amaryllis
Lilium-convallium, <i>Tourn.</i>	Lily of the Valley	Convallaria
Limnopenice, <i>Vaill.</i> A. G.		Hippuris
Limodorum, <i>Tourn.</i>	Purple Bird's Nest	Orchis
Limon, <i>Tourn.</i>	Lemon	Citrus
		Limo-

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Limonium, <i>Tourn.</i>	Sea Lavender	Statice
Linagrostis, <i>Mich. & Tourn.</i>	Cotton Grass	Eriophorum
Linaria, <i>Tourn.</i>	Toad Flax	Antirrhinum
Lingua cervina, <i>Tourn.</i>	Hart's Tongue	Asplenium
Linocarpon, <i>Mich.</i>	Least Rupture-wort, or All Seed	Linum
Lirium, <i>Roy.</i>	Lily	Lilium
Lithophyton, <i>Tourn.</i>		Lithoxylon
Lonchitis, <i>Tourn.</i>	Rough Spleen-wort	Polypodium
Luffa, <i>Tourn. A.G. Dill.</i>	Egyptian Cucumber	Momordica
<i>gen. & Elzb.</i>		
Lunularia, <i>Mich.</i>		Marchantia
Lupinaster, <i>Buxb.</i>		Trifolium
Lupulus, <i>Tourn.</i>	Hop	Humulus
Luteola, <i>Tourn.</i>	Wild Woad, or Dyer's Weed	Reseda
Lychnidea, <i>Dill. Elzb.</i>	Bastard Lychnis	Phlox
Lychni-scabiosa, <i>Boerb.</i>		Knautia
Lycogala, <i>Mich.</i>		Mucor
Lycoperdastrum, <i>Mich.</i>		Lycoperdon
Lycoperdoides, <i>Mich.</i>		Lycoperdon
Lycoperficon, <i>Tourn.</i>	Wolf's Peach, or Love Apple	Solanum
Lycopodioides, <i>Dill.</i>		Lycopodium
<i>Musc.</i>		

M

Malachodendron, <i>Mitch.</i>		Stewartia
Malacoides, <i>Tourn.</i>	Bastard Mallow	Malope
Malva, <i>Tourn.</i>	Rose Mallow, or Holly- hock	Alcea
Malvaviscus, <i>Dill. Elzb.</i>	Berry-bearing Hibiscus	Hibiscus
Malvinda, <i>Dill. Elzb.</i>	Indian Mallow, with sin- gle Seeds	Sida
Malus, <i>Tourn.</i>	Apple	Pyrus
Mamei, <i>Plum.</i>	Mammee	Mammea
Mancanilla, <i>Plum.</i>	Manchineel	Hippomane
Mangles, <i>Plum.</i>	Pee-kandel of the Indians	Rhizophora
Mangostans, <i>Garc. A.A.</i>	Mangostan	Garcinia

Ma-

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GENERIC NAMES REJECTED,	ENGLISH NAMES.	LINNÆAN GENERA.
Manihot, <i>Tourn. & Dill.</i> Cassava <i>Elb.</i>		Jatropha
Maurocenia, <i>Lin. gen. pl.</i> Hottentot Cherry <i>Ed. prim.</i>		Cassine
Mays, <i>Tourn.</i>	Indian, or Turkey Wheat	Zea
Medica, <i>Tourn.</i>	Snail Trefoil, and Medic or Lucern Grass	Medicago
Melanoschoenus, <i>Micb. gen.</i>	Round black-headed Marsh Rush, or Bog Rush	Schoenus
Melilobus, <i>Mitch.</i>	Three Thorn'd Acacia	Gleditsia
Melilotus, <i>Tourn.</i>	Melilot	Trifolium
Melo, <i>Tourn.</i>	Melon	Cucumis
Melocactus, <i>Tourn.</i>	Melon Thistle	Cactus
Melongena, <i>Tourn.</i>	Mad Apple, or Egg Plant	Solanum
Melopepo, <i>Tourn.</i>	Buckler Gourd	Cucurbita
Memecylum, <i>Micb.</i>	Trailing Arbutus	Epigæa
Methonica, <i>Tourn.</i>	Superb Lily	Gloriosa
Meum, <i>Tourn.</i>	Spignel	Athamanta
Michelia, <i>Houff. A. A.</i>		Pontederia
Michelia, <i>Amm. Ad Pet.</i>		Gmelina
Microleuconymphaea, <i>Boerb.</i>	Frog's Bit	Hydrocharis
Millefolium, <i>Tourn.</i>	Yarrow, or Milfoil	Achillea
Mitra, <i>Houff.</i>		Ophiorrhiza
Mitreola, <i>Lin. gen. pl. Ed. prim.</i>		Ophiorrhiza
Moldavica, <i>Tourn.</i>	Turkey or Moldavian Baulm	Dracocephalum
Molle, <i>Tourn.</i>	Peruvian Mastich	Schinus
Molucca, <i>Tourn.</i>	Molucca Baulm	Moluccella
Moly, <i>Boer.</i>	Moly with Lily Flowers, or Homer's Moly	Allium
Nonbin, <i>Plum.</i>	Brasilian Plum	Spondias
Monilifera, <i>Vaill. A. G.</i>	Hard-seeded Cyrysanthemum	Osteospermum
Monospermalthæa, <i>Isnar. A. G.</i>		Waltheria
Montia, <i>Houff. A. A.</i>		Heliocharpos
Morocarpus, <i>Rupp.</i>	Blite, or Strawberry Spi- nach	Blitum
Morsus ranæ, <i>Tour. A. G.</i>	Frog's Bit	Hydrocharis Mos-

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Moschatellina, <i>Tourn.</i>	Tuberoſe Moſchatel, or Hollow Root	Adoxa
Mucilago, <i>Mich.</i>		Mucor
Murucuja, <i>Tourn.</i>	Paſſion Flower	Paſſiflora
Muscari, <i>Tourn.</i>	Grape Hyacinth	Hyacinthus
Muscoides, <i>Mich.</i>		Jungerman- nia
Myofotis, <i>Tourn.</i>	Mouse-ear Chickweed	Cerastium
Myofuros, <i>Dill. gen.</i>	Mouse Tail	Myofurus
Myrobatindum, <i>Vaill. A. G.</i>	American Viburnum	Lantana

N

Narcisso-Leucojum, <i>Tourn.</i>	Greater Snowdrop	Leucojum
Nasturtium, <i>Tourn.</i>	Cress	Lepidium
Nelumbo, <i>Tourn.</i>	Indian Water Lily	Nymphæa
Nhandiroba, <i>Plum.</i>		Fevillea
Ninfi, <i>Breyn. diff.</i>	Ginseng	Panax
Nummularia, <i>Nov. gen.</i>		Holoſteum
Nux, <i>Tourn. & Boerb.</i>	Walnut	Juglans
Nymphoides, <i>Tourn.</i>	Leſſer yellow Water Lily with fringed Flowers	Menyanthes

O

Obeliſcotheca, <i>Vaill. A. G.</i>	Dwarf Sun-flower	Rudbeckia
& <i>Dill. Elth.</i>		
Ochruſ, <i>Tourn.</i>	Wild winged Pea	Piſum
Odontitis, <i>Dill. gen.</i>	Red Meadow Eye-bright	Euphraſia
Omphalodes, <i>Tourn.</i>	Venus's Navel-wort	Cynogloſſum
Onagra, <i>Tourn.</i>	Tree Primroſe	Oenothera
Onobrychis, <i>Tourn.</i>	Cock's Head, or Saint Foin	Hedyſarum
Ophris, <i>Tourn.</i>	Twy Blade	Ophrys
Opulus, <i>Tourn. & Vaill. A. G.</i>	Maſh Elder, or Gelder Roſe	Viburnum
Opuntia, <i>Tourn.</i>	Indian Fig, or Prick'y Pear	Cactus
Orchidion, <i>Mitch.</i>		Arethufa
Oreofelinum, <i>Tourn.</i>	Mountain Parſley	Athamanta
Ornithopodium, <i>Tourn.</i>	Bird's Foot	Ornithopus
		Ornus,

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Ornus, <i>Mich.</i>	Ash	Fraxinus
Orobanchoides, <i>Tourn.</i> A. G.		Monotropa
Ostrya, <i>Mich.</i>	Hornbeam	Carpinus
Oxycoccus, <i>Tourn.</i>	Marsh Whortle Berries, Moss Berries, or Moor Berries	Vaccinium
Oxyoides, <i>Garc. A. A.</i>	Sensitive Wood Sorrel	Oxalis
Oxys, <i>Tourn.</i>	Wood Sorrel	Oxalis
P		
Padus, <i>Lin. gen. pl. Ed.</i> <i>prim.</i>	Bird Cherry	Prunus
Paliurus, <i>Tourn.</i>	Christ's Thorn	Rhamnus
Panacea, <i>Mitch.</i>	Ginseng	Panax
Panicastrella, <i>Mich.</i>		Cenchrus
Papaya, <i>Tourn.</i>	Papaw	Carica
Papia, <i>Mich.</i>		Orvala
Paronychia, <i>Tourn.</i>	Mountain Knot-grass	Illecebrum
Partheniastrum, <i>Niff. A.</i> G. <i>Dill. gen. & Elth.</i>	Bastard Feverfew	Parthenium
Patagonica, <i>Dill. Elth.</i>		Patagonula
Pavia, <i>Boerb.</i>	Scarlet Horse Chestnut	Æsculus
Pedicularis species, <i>Tourn.</i>	Yellow Rattle, Cock- comb, or Louse-wort	Rhinanthus
Pelecinus, <i>Tourn.</i>	Clusius's foreign Hatchet Vetch	Biserrula
Penæa, <i>Plum.</i>	Tree Milk-wort, with a rough Box Leaf	Polygala
Pentagonotheca, <i>Vaill.</i> A. G.	Fingrigo	Pisonia
Pentaphylloides, <i>Tourn.</i>	Cinquefoils, whose Leaves are not quite quinate	Potentilla
Pentapterophyllum, <i>Dill.</i> <i>gen.</i>	Water Milfoil	Myriophyl- lum
Pepo, <i>Tourn.</i>	Pumpion	Cucurbita
Percepier, <i>Dill. gen.</i>	Parsley Piert	Aphanes
Perefskia, <i>Plum. Lin. gen.</i> <i>pl. Ed. prim.</i>	Gooseberry of the Ame- ricans, or Blad Apple	Cactus
Periclymenum, <i>Tourn.</i>	Trumpet Honeyfuckle	Lonicera

Per.

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERAL.
<i>Persea, Plum.</i>	Avocado, or Avogato Pear	<i>Laurus</i>
<i>Perfica, Tourn.</i>	Peach	<i>Amygdalus</i>
<i>Perficaria, Tourn.</i>	Arse-smart, or <i>Perficaria</i>	<i>Polygonum</i>
<i>Pervinca, Tourn.</i>	Periwinkle	<i>Vinca</i>
<i>Petasites, Tourn. & Vaill.</i>	Butterburr, or Pestilent- wort	<i>Tussilago</i>
<i>Petilium, Lin. gen. pl. Ed. prim.</i>	Crown Imperial	<i>Fritillaria</i>
<i>Phalangium, Tourn.</i>	Spider-wort	<i>Anthericum</i>
<i>Phalloboletus, Mich.</i>		<i>Phallus</i>
<i>Phillyreastrum, Vaill. A. G.</i>		<i>Morinda</i>
<i>Pilosella, Vaill. A. G.</i>	Creeping Mouse-car	<i>Hieracium</i>
<i>Pimpinella, Tourn.</i>	Burnet	<i>Poterium</i>
<i>Pinastella, Dell. gen.</i>		<i>Hippuris</i>
<i>Pinguin, Dill. Elsb.</i>	Wild Ananas	<i>Bromelia</i>
<i>Pittonia, Plum.</i>		<i>Tournefortia</i>
<i>Plantaginella, Dill. gen.</i>	Least Water Plantain	<i>Limosella</i>
<i>Plantanocephalus, Vaill. A. G.</i>	Button-wood	<i>Cephalanthus</i>
<i>Poliifolia, Buxb. A. R.</i>	Marsh Cistus, or Wild Rosemary	<i>Andromeda</i>
<i>Polium, Tourn.</i>	Poley Mountain	<i>Teucrium</i>
<i>Polyacantha, Vaill. A. G.</i>	Casaubon's Thistle, sup- posed the true Fish Thistle or Acarna of Theophrastus	<i>Carduus</i>
<i>Polygaloides, Dill. gen.</i>	Milk-wort	<i>Polygala</i>
<i>Polygonatum, Tourn.</i>	Solomon's Seal	<i>Convallaria</i>
<i>Polygonifolia, Dill. gen.</i>		<i>Corrigiola</i>
<i>Polygonoides, Tourn.</i>		<i>Calligonum</i>
<i>Polyporus, Mich.</i>		<i>Boletus</i>
<i>Populago, Tourn.</i>	Marsh Marigold	<i>Caltha</i>
<i>Porophyllum, Vaill. A. G.</i>	Cacalia with perforate Leaves	<i>Cacalia</i>
<i>Porrum, Tourn.</i>	Leek	<i>Allium</i>
<i>Portula, Dill. gen.</i>	Water Purslane	<i>Peplis</i>
<i>Portulacastrum, B. Jusf.</i>	Horse Purslane	<i>Trianthema</i>
<i>Potamopithys, Buxb. A. R.</i>		<i>Elatine</i>
<i>Primula veris, Tourn.</i>	Primrose	<i>Primula</i>

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Provenzalia, <i>Petit. Gen.</i>	Water Dragons	Calla
Pseudoacacia, <i>Tourn.</i>	False Acacia	Robinia
Pseudocyperus, <i>Mich.</i>		Schoenus
Pseudodictamnus, <i>Tourn.</i>	Bastard Dittany	Marrubium
Pseudoruta, <i>Mich.</i>	Three-leaved Rue	Ruta
Psyllium, <i>Tourn.</i>	Flea-wort	Plantago
Ptarmica, <i>Tourn.</i>	Sneeze-wort, Bastard Pel- litory, or Goose-tongue	Achillea
Pterocephalus, <i>Vail. A.G.</i>	Scabious	Scabiosa
Pterospermadendron, <i>Am</i>		Pentapetes
Pulsatilla, <i>Tourn.</i>	Pasque Flower	Anemone

Q

Quamoclit, <i>Tourn.</i>		Ipomoea
Quinquefolium, <i>Tourn.</i>	Cinquefoil	Potentilla
Quinquina, <i>Condam. A.G.</i>	True Jesuits Bark Tree	Cinchona

R

Radicula, <i>Dill. gen.</i>	Water Radish	Sisymbrium
Radiola, <i>Dill. gen.</i>	Least Rupture-wort, or All Seed	Linum
Ranunculoides, <i>Vail. A.G.</i>	Water Crowfoot	Ranunculus
Rapa, <i>Tourn.</i>	Turnep	Brassica
Raphanistrum, <i>Tourn.</i>	White flowered Charlock with jointed Pods	Raphanus
Rapistrum, <i>Tourn.</i>	Sea Cabbage	Crambe
Rapunculus, <i>Tourn.</i>	Rampions	Phyteuma
Rapuntium, <i>Tour. & Dill.</i>	Cardinal Flower	Lobelia
<i>Elb.</i>		
Rhabarbarum, <i>Tourn.</i>	Rhubarb	Rheum
Rhagadioloides, <i>Va. A.G.</i>		Hyoseris
Rhagadiolus, <i>Vaill. A.G.</i>		Lapsana
<i>& Tourn.</i>		
Rhamnoides, <i>Tourn.</i>	Bastard Rhamnus, or Sea Buckthorn	Hippophaë
Rhaponticoides, <i>Vaill.</i>	Centauray	Centaurea
Rhapontium, <i>Vaill.</i>	Centauray	Centaurea
Ribesium, <i>Dill. Elb.</i>	Curran Tree	Ribes
Ricinocarpus, <i>Ber. & Bur.</i>		Acalypha
Ricinoides, <i>Tourn.</i>	Bastard Ricinus	Croton
Rivina, <i>Plum.</i>		Rivinia

Loc-

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
Royenia, <i>Houft. A. A.</i>		Loefelia
Rojoc, <i>Plum.</i>		Morinda
Ros solis, <i>Tourn.</i>	Sun-dew	Drosera
Rubeola, <i>Tourn.</i>	Petty Madder	Crucianella
Rudbeckia, <i>Houft. A. A.</i>	Button-tree	Conocarpus
Ruppia, <i>Æt. Ang.</i>	Grass Wrack	Zostera
Ruta muraria, <i>Tourn.</i>	Wall-rue, or 'Tent-wort	Asplenium
S		
Sabina, <i>Boerb.</i>	Savine	Juniperus
Sagitta, <i>D. g. & V. A. G.</i>	Arrow-head	Sagittaria
Salicaria, <i>Tourn.</i>	Willow-herb, or Purple Loosestrife	Lythrum
Salvinia, <i>Mich.</i>		Marfilea
Santolinoides, <i>Va. A. G.</i> & <i>Mich. gen.</i>		Anacyclus
Sapota, <i>Plum.</i>	Sapota	Achras
Sassafras, <i>Off.</i>	Sassafras Tree	Laurus
Saururus, <i>Plum.</i>	Lizard's Tail	Piper
Schunda Pana, <i>Hort. Mal.</i>		Caryota
Scirpocyperus, <i>Mitch.</i>	Rush Grass	Scirpus
Scirpoides, <i>Mont.</i>		Carex
Sclarea, <i>Tourn.</i>	Clary	Salvia
Scorodoprasum, <i>Mich.</i>	Great round-headed, or Turkey Garlic	Allium
Scorpioides, <i>Tourn.</i>	Caterpillars	Scorpiurus
Scorzoneroides, <i>Va. A. G.</i>	Vipers Grass	Scorzonera
Sebestena, <i>Dill. Elth.</i>	Sebesten	Cordia
Securidaca, <i>Tourn.</i>	The True Hatchet Vetch, or Sickle-wort	Coronilla
Sedi species, <i>Tourn.</i>	Houseleek	Sempervivum
Selaginoides, <i>Dill. Musc.</i>		Lycopodium
Selago, <i>Dill. Musc.</i>	Upright Fir Moss	Lycopodium
Senecionis species, <i>D. Elt.</i>		Erigeron
Senna, <i>Tourn.</i>	Senna of the Shops	Cassia
Seriana, <i>Plum.</i>		Paullinia
Sesamoides, <i>Tourn.</i>	Bastard Rocket	Reseda
Sherardia, <i>Vail.</i>	Vervain	Verbena
Sherardia, <i>Pont. Epist.</i>		Galenia
Sicyoides, <i>Tourn.</i>	Single-seeded Cucumber	Sicyos
Siliqua, <i>Tourn.</i>	Carob-tree, or St. John's Bread	Ceratonia Sili-

T A B L E II.

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
<i>Silivastrum, Tourn.</i>	Judas-tree	<i>Cercis</i>
<i>Silybum, Vaill. A. G.</i>	Milk Thistle, or Lady's Thistle	<i>Carduus</i>
<i>Sinapi, Tourn.</i>	Mustard	<i>Sinapis</i>
<i>Sinapistrum, Tourn.</i>	Bastard Mustard	<i>Cleome</i>
<i>Siphonanthemum, Amm.</i> <i>As. Petrop.</i>		<i>Siphonanthus</i>
<i>Sifarum, Tourn.</i>	Skirret	<i>Sium</i>
<i>Sisyrrinchium, Tourn.</i>	Iris with a double Bulb, called Spanish Nut	<i>Iris</i>
<i>Sloana, Plum.</i>	Apeiba of the Brasilians	<i>Sloanea</i>
<i>Solanoides, Tourn. A. G.</i>	American Night-shade	<i>Rivina</i>
<i>Sorgum, Mich.</i>	Indian Millet	<i>Holcus</i>
<i>Spartium, Tourn.</i>	Single-seeded Broom	<i>Genista</i>
<i>Sphondylium, Tourn.</i>	Cow Parsnep	<i>Heracleum</i>
<i>Sphondylococcus, Mitch.</i>	Johnsonia	<i>Callicarpa</i>
<i>Stachyarpagophora, Vaill. A. G.</i>	Cock's comb	<i>Celofia</i>
<i>Staphylodendron, Tourn.</i>	Bladder Nut	<i>Staphylæa</i>
<i>Stellaria, Dill. gen.</i>		<i>Callitriche</i>
<i>Stellaris, Dill. gen.</i>	Yellow Star of Bethlem	<i>Ornithogalum</i>
<i>Stœchas, Tourn.</i>	French Lavender	<i>Lavandula</i>
<i>Stramonium, Tou. & Pont.</i>	Thorn Apple	<i>Datura</i>
<i>Stratiotes, Vaill. A. G.</i>	Water Milfoil, or Water Violet	<i>Hottonia</i>
<i>Stratiotes, Dill. gen.</i>	Frog's Bit	<i>Hydrocharis</i>
<i>Struthia, Royen.</i>		<i>Gnidia</i>
<i>Suber, Tourn.</i>	Cork-tree	<i>Quercus</i>
<i>Succisa, Vaill. A. G.</i>	Devil's-bit	<i>Scabiosa</i>
<i>Suillus, Mich.</i>		<i>Boletus</i>
<i>Symphoricarpos, Dill. El.</i>	Shrubby St. Peter's-wort	<i>Lonicera</i>
<i>Syringa, Tourn.</i>	Mock Orange, or Syringa	<i>Philadelphus</i>

T

<i>Tamariscus, Tourn.</i>	Tamarisk	<i>Tamarix</i>
<i>Tamnus, Tourn.</i>	Black Bryony	<i>Tamus</i>
<i>Tapia, Plum.</i>	Garlick Pear	<i>Crateva</i>
<i>Taraxaconastrum, V. A. G.</i>		<i>Hyoferis</i>
<i>Taraxaconoides, V. A. G.</i>	Dandelion	<i>Leontodon</i>
<i>Tarchonanthus, Va. As.</i>	Jesuit's Bark-tree, falsely so called	<i>Iva</i>

Y

Te-

GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNEAN GENERA.
<i>Telephiastrum</i> , <i>Dill. Elth</i>	African Purslane	<i>Portulaca</i>
<i>Telephioides</i> , <i>T. & D. Elth</i>	Bastard Orpine	<i>Andrachne</i>
<i>Tenga</i> , <i>Hort. Mal.</i>	Cocoa Nut	<i>Cocos</i>
<i>Terebinthus</i> , <i>Tourn.</i>	Turpertine-tree	<i>Pistacia</i>
<i>Ternatea</i> , <i>Tourn. A. G.</i>		<i>Clitoria</i>
<i>Tetrahit</i> , <i>Dill. gen.</i>	Bastard Hemp	<i>Galeopsis</i>
<i>Thlaspidium</i> , <i>Tourn.</i>	Buckler Mustard	<i>Biscutella</i>
<i>Thymbra</i> , <i>Tourn.</i>	Savory, with verticillate Flowers	<i>Satureja</i>
<i>Thymelæa</i> , <i>Tourn.</i>	Mezereon, or Spurge- Laurel	<i>Daphne</i>
<i>Thysselinum</i> , <i>Tourn.</i>	Milky Parsley	<i>Selinum</i>
<i>Tinus</i> , <i>Tourn. & Vaill. A. G.</i>	<i>Laurustinus</i>	<i>Viburnum</i>
<i>Titanokeratophyton</i> , <i>Bo.</i>		<i>Lithoxylon</i>
<i>Tithymaloides</i> , <i>Tourn.</i>	Bastard Spurge	<i>Euphorbia</i>
<i>Tithymaloides</i> (an) <i>Klein</i>	Cabbage-tree, or Carna- tion-tree	<i>Cacalia</i>
<i>Menagr.</i>		
<i>Tithymalus</i> , <i>Tourn.</i>	Spurge	<i>Euphorbia</i>
<i>Tournefortia</i> , <i>Pont. Epif.</i>	Amber-tree	<i>Anthospermum</i>
<i>Toxicodendron</i> , <i>Tourn.</i>	Poison-tree	<i>Rhus</i>
<i>Tragacantha</i> , <i>Tourn.</i>	Goat's-horn	<i>Atragalus</i>
<i>Tragopogonoides</i> , <i>Vaill. A. G.</i>	Goat's-beard with crook- ed Seeds	<i>Tragopogon</i>
<i>Tragofelinum</i> , <i>Tourn.</i>	Burnet Saxifrage	<i>Pimpinella</i>
<i>Tribuloides</i> , <i>Tourn.</i>	Water Caltrops	<i>Trapa</i>
<i>Trichomanes</i> , <i>Tourn.</i>	English black Maiden- hair	<i>Asplenium</i>
<i>Trifolium</i> , <i>Mitch.</i>	White flowered Meadow Trefoil, Honeytuckle Grass, or Dutch Clover	<i>Trifolium</i>
<i>Trilopus</i> , <i>Mitch.</i>	Witch Hazel	<i>Hamamelis</i>
<i>Triosteospermum</i> , <i>D. El.</i>	Fever-root, Doctor Tin- ker's Weed, or False Ipecacuana	<i>Triosteum</i>
<i>Trixis</i> , <i>Mitch.</i>		<i>Proserpinaca</i>
<i>Tulipifera</i> , <i>Catesb.</i>	Tulip tree	<i>Liriodendron</i>
<i>Tuna</i> , <i>Dill. Elth.</i>	Indian Fig, or Prickly Pear	<i>Cactus</i>
<i>Tunica</i> , <i>Dill. Elth.</i>	Pink	<i>Dianthus</i>

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GENERIC NAMES REJECTED.	ENGLISH NAMES.	LINNÆAN GENERA.
V		
Valdia, <i>Plum.</i>		Ovieda
Valerianella, <i>Tour. & Va.</i>	Lamb's Lettuce, or Corn-Sallad	Valeriana
Vallisneroides, <i>Michx.</i>		Valisneria
Vanilla, <i>Plum.</i>	Vanilla	Epidendrum
Vanrheedia, <i>Plum.</i>		Rheedia
Vesicaria, <i>Rivinus.</i>	Heart-seed, or Heart-pea	Cardiospermum
Vesicaria, <i>Tourn.</i>	Madwort with bladdery Pods	Alyssum
Virga aurea, <i>T. & V. A. G.</i>	Golden Rod	Solidago
Virga sanguinea, <i>Dill.</i>	Female Dog-wood, Dog-berry, or Gatter tree	Cornus
Viscago, <i>Dill. Elsb.</i>	Viscous Campion, or Catch-fly	Silene
Viticella, <i>Mitch.</i>		Galax
Viticella, <i>Dill. gen.</i>	Virgin's Bower, or Lady's Bower	Clematis
Vitis Idea, <i>Tourn.</i>	Whortle Berry	Vaccinum
Ulmaria, <i>Tourn.</i>	Meadow-sweet, or Queen of the Meadows	Spiræa
Unifolium, <i>Dill. gen.</i>	One-blade	Convallaria
Volubilis, <i>Dill. Elsb.</i>		Ipomoea
Ufnea, <i>Dill. Musc.</i>	Tree Moss	Lichen
Uva ursi, <i>Tourn.</i>	Spanish Redwhorts, or Bearberries	Arbutus
Vulneraria, <i>Tourn.</i>	Kidney Vetch, or Lady's Finger	Anthyllis

X

Xeranthemoides, <i>D. Elsb.</i>		Xeranthemum
Xiphium, <i>Tourn.</i>	Bulbous Iris	Iris
Xylon, <i>Lin. gen. pl. Ed. pr.</i>	Silk Cotton-tree	Bombax
Xylon, <i>Tourn.</i>	Cotton	Gossypium
Xylosteum, <i>Tourn.</i>	Fly Honeyfuckle	Lonicera

Z

Zacintha, <i>Va. A. G. & T.</i>	Wart Succory	Lapsana
Zanonia, <i>Plum.</i>		Commelina
Ziziphus, <i>Tourn.</i>	Jujube-tree	Rhamnus

Y 2

APPEN-



A P P E N D I X.

A TABLE, containing such English Names of Plants as have been most generally received, whether Specific or Generic; and shewing the Titles of the Genera under which they are severally ranged in the LINNÆAN System.

N. B. The English Titles are distinguished by the Roman Characters, and the LINNÆAN by the *Italic*.—The Latin Names in common Use, such as *Anemone*, *Ranunculus*, &c. are omitted in this List, being to be found in the first Table.

A	
Abele, <i>Populus</i>	Ale-cost, <i>Tanacetum</i>
Abelmosk, <i>Hibiscus</i>	Ale-hoof, <i>Glechoma</i>
Acacia, <i>Mimosa</i>	Alexanders, <i>Smyrnum</i>
Acacia, false, <i>Robinia</i>	Alkali, <i>Salicornia</i>
Acacia, German, <i>Prunus</i>	Alkanet, <i>Lithospermum</i>
Acacia, three thorned, <i>Gleditsia</i>	Alkekengi, <i>Prysalis</i>
Acajou, <i>Anacardium</i>	All-good, <i>Chenopodium</i>
Aconite, <i>Aconitum</i>	All-heal, Clowns, <i>Stachys</i>
Aconite, Winter, <i>Helleborus</i>	All-heal, Hercules's, <i>Pastinaca</i>
Adam's Apple, <i>Citrus</i>	All-heal, Hercules's, <i>Heracleum</i>
Adam's Needle, <i>Yucca</i>	All-feed, <i>Linum</i>
Adder's-wort, <i>Polygonum</i>	All-spice, <i>Myrtus</i>
Adder's Tongue, <i>Ophioglossum</i>	Alligator Pear, <i>Laurus</i>
Adragant, Gum, see <i>Tragacanth</i>	Almond, <i>Amygdalus</i>
Agaric, <i>Agaricus</i>	Almond, African, <i>Brabejum</i>
Agnus castus, <i>Vitex</i>	Almond, Ethiopian, <i>Brabejum</i>
Agrimony, <i>Agrimonia</i>	Aloe, American, <i>Agave</i>
Agrimony, Bastard, <i>Agrimonia</i>	Aloe, Water, <i>Stratiotes</i>
Agrimony, Hemp, <i>Eupatorium</i>	Althæa frutex, <i>Hibiscus</i>
Agrimony, Bastard Hemp, <i>Agrimonium</i>	Alysson, Rough-leaved, <i>Subularia</i>
Agrimony, Naked-headed Hemp, <i>Verbena</i>	Amaranth, <i>Amaranthus</i>
Agrimony, Water Hemp, <i>Bidens</i>	Amaranth, Globe, <i>Gomphrena</i>
Ague Tree, <i>Laurus</i>	Amber Tree, <i>Anthospermum</i>
Alaternus, Bastard, <i>Phytica</i>	Amellus of Virgil, <i>Aster</i>
Alder, <i>Betula</i>	Amomum Plinii, <i>Solanum</i>
Alder, Black or Berry-bearing, <i>Rhamnus</i>	Amomum, German, <i>Sison</i>
	Ananas, <i>Bromelia</i>
	Ananas, Wild, <i>Bromelia</i>
	Anemone, Wood, <i>Anemone</i>
	Angelica, Berry-bearing, <i>Aralia</i>
	An-

- Angelica, Wild, *Ægopodium*
 Angelica Tree, *Aralia*
 Anise, *Pimpinella*
 Anotta, *Bixa*
 Apeiba of the Brasilians, *Sloanea*
 Apple, *Pyrus*
 Apple, Adam's, *Citrus*
 Apple, Blad, *Cactus*
 Apple, Custard, *Annona*
 Apple, Love, *Solanum*
 Apple, Mad, *Solanum*
 Apple, Male Balsam, *Momordica*
 Apple, May, *Podophyllum*
 Apple, Pine, *Bromelia*
 Apple, Purple, *Annona*
 Apple, Soap, *Sapiindus*
 Apple, Sour, *Annona*
 Apple, Star, *Chrysophyllum*
 Apple, Sugar, *Annona*
 Apple, Sweet, *Annona*
 Apple, Thorn, *Datura*
 Apple, Water, *Annona*
 Apricot, *Prunus*
 Arbor Vitæ, *Thuja*
 Arbutus, Trailing, *Epigæa*
 Archangel, *Lamium*
 Archangel, Baulm-leav'd, *Melittis*
 Archangel, Yellow, *Galeopsis*
 Arrowhead, *Sagittaria*
 Arrow-headed Grass, *Triglochin*
 Arrow-root, Indian, *Maranta*
 Arse-smart, *Polygonum*
 Artichoke, *Cynara*
 Artichoke, Jerusalem, *Helianthus*
 Arum, African, *Calathea*
 Arum, Floating, *Orentium*
 Asarabacca, *Ajacum*
 Ash, *Fraxinus*
 Ash, Mountain, *Sorbus*
 Ash, Poiton, *Rhus*
 Asparagus, Climbing African
 Medeola
 Asp, or Aspen Tree, *P. pulus*
 Asphodel, *Asphodelus*
 Asphodel, African, *Anthericum*
 Asphodel, Lily, *Hemerocallis*
 Asphodel, Lily, *Crinum*
 Asses Cucumber, *Momordica*
 Atamaasco Lily, *Amaryllis*
 Avens, *Geum*
 Avocado Pear, *Laurus*
 Avogato Pear, *Laurus*
 Auricula, *Primula*
 Auricula, Borrage-leav'd, *Verbascum*
 Ax-vetch, see Hatchet-vetch
 Azarole, *Cratægus*
 Azerira, *Prunus*

B

 Balauetine, *Punica*
 Balm, see Baulm
 Balm of Gilead *
 Balm of Gilead, false, *Dracoccephalon*
 Balsam, *Impatiens*
 Balsam of Tolu, *Toluifera*
 Balsam Apple, Male, *Momordica*
 Balsam Tree, *Clusia*
 Balsam Tree, *Pistacia*
 Balsam Tree, *Copaifera*
 Balsamine, Female, *Impatiens*
 Bambu Cane, *Arundo*
 Banana, *Musa*
 Bane-berries, *Achæa*
 Banian Tree, *Ficus*
 Bark, True Jesuit's, *Cinchona*
 Bark, False Jesuit's, *Iva*
 Bark, Ilathera, *Clusia*
 Bark, Winter's, *Laurus*
 Barley, *Hordeum*
 Barren-wort, *Epimedium*
 Base-tree Trefoil, *Cytisus*
 Basil, *Ocimum*

* This is the *Balsamum Syriacum Ruta folio* of Caspar Baubin, and seems to be omitted by Linnaeus.

- Basil, Field, *Clinopodium*
 Basil, American Field, *Monarda*
 Basil, Syrian Field, *Ziziphora*
 Basil, Stone, *Thymus*
 Basil, Wild, *Thymus*
 Batchelor's Buttons, *Lychnis*
 Batchelor's Pear, *Solanum*
 Baulm, *Melissa*
 Baulm, Bastard, *Melittis*
 Baulm, Moldavian, *Dracocephalum*
 Baulm, Molucca, *Moluccella*
 Baulm, Turkey, *Dracocephalum*
 Bay, *Laurus*
 Bay, Loblolly, *Gordonia*
 Bay, Rose, *Nerium*
 Bay, Dwarf Rose, *Rhododendrum*
 Bay, Mountain Rose, *Rhododendrum*
 Bay, Sweet-flowering, *Magnolia*
 Bay Plumb, *Psidium*
 Bead Tree, *Melia*
 Bean, *Vicia*
 Bean, Bog, *Menyanthes*
 Bean, French, *Phaseolus*
 Bean, Kidney, *Phaseolus*
 Bean Tree, Kidney, *Glycine*
 Bean Tree of America, *Erythrina*
 Bean Tree, Binding, *Mimosa*
 Bean Caper, *Zygophyllum*
 Bean Trefoil, *Cytisus*
 Bean Trefoil, Stinking, *Anagyris*
 Bear-berries, *Arbutus*
 Bear-bind, *Convolvulus*
 Bear's-breach, *Acanthus*
 Bear's-ear, *Primula*
 Bear's-ear Sanicle, *Cortusa*
 Bear's-foot, *Heleborus*
 Beard, Old Man's, *Clematis*
 Beech, *Fagus*
 Beet, *Beta*
 Bee-flower, *Ophrys*
 Behen, White, *Cucubalus*
 Bell flower, *Campanula*
 Bells, Canterbury, *Campanula*
 Bells, Coventry, *Campanula*
 Bells, Hair, *Hyacinthus*
 Bell-Pepper, *Capficum*
 Belladonna Lily, *Amaryllis*
 Belvidere, *Chenopodium*
 Bellyach-weed, *Jatropha*
 Benjamin Tree, *Laurus*
 Bennet, Herb, *Geum*
 Berberry, *Berberis*
 Bermudiana, *Sisyrinchium*
 Betony, *Betonica*
 Betony, Paul's, *Veronica*
 Betony, Water, *Scrophularia*
 Big, *Hordeum*
 Bilberry, *Vaccinium*
 Bindweed, *Convolvulus*
 Bindweed, Black, *Tamus*
 Bindweed, Rough, *Smilax*
 Birch, *Betula*
 Birch of Jamaica, *Pistacia*
 Bird-cherry, *Prunus*
 Bird Pepper, *Capficum*
 Bird's Eye, *Adonis*
 Bird's Foot, *Ornithopus*
 Bird's Foot Trefoil, *Lotus*
 Bird's Nest, *Ophrys*
 Bird's Nest, Purple, *Orchis*
 Birth-wort, *Aristolochia*
 Bishop's-weed, *Ammi*
 Bistort, *Polygonum*
 Bitter-gourd, *Cucumis*
 Bitter-iweet, *Solanum*
 Bitter-vetch, *Ervum*
 Bitter-vetch, *Orobis*
 Bitter-vetch, jointed podded, *Ervum*
 Bitter-wort, *Gentiana*
 Blackberry, *Rubus*
 Blad Apple, *Caëus*
 Bladder Nut, *Staphylea*
 Bladder Nut, African, *Royena*
 Bladder Nut, Laurel leaved, *Ilex*
 Bladder Senna, *Colutea*
 Bladder Senna, jointed podded, *Coronilla*
 Blessed Thistle, *Cnicus*
 Blinks,

Blinks, *Montia*
 Blite, *Blitum*
 Blite, *Amaranthus*
 Blood-flower, *Hemantibus*
 Blood-wood, *Hematoxylon*
 Blood-wort, *Rumex*
 Blue-bottle, *Centaurea*
 Bogbean, *Menyanthes*
 Bogberries, *Vaccinium*
 Bogwhorts, *Vaccinium*
 Bonduc, *Guilandina*
 Bonnet Pepper, *Capsicum*
 Bore-cole, *Brassica*
 Borrage, *Borrago*
 Bottle-flower, *Centaurea*
 Box, *Buxus*
 Box, African, *Myrsine*
 Box, Low, *Polygala*
 Boxthorn, *Lycium*
 Brakes, *Pteris*
 Bramble, *Rubus*
 Brank, *Polygonum*
 Brack Urline, *A. anthus*
 Brasiletto, *Cassipina*
 Break-stone, *Saxifraga*
 Break-stone, Parsley, *Aphanes*
 Briar, Sweet, *Rosa*
 Briar, Wild, *Rosa*
 Brimstone-wort, *Prucedanum*
 Bristol, Flower of, *Lycnis*
 Broccoli, *Brassica*
 Brooklime, *Veronica*
 Broom, *Spartium*
 Broom, African, *Acalathus*
 Broom, Dyer's, *Genista*
 Broom, Dwarf, *Genista*
 Broom, Single-seeded, *Genista*
 Broom Rape, *Orobancha*
 Broom Rape, with great Purple
 Flowers, *Lathæa*
 Brown-wort, *S. rosbularia*
 Brown-wort, *Prunella*
 Bryony, *Bryonia*
 Bryony, Black, *Tamus*
 Buckler, Mustard, *Biscutella*
 Bucks-horn Plantain, *Plantago*

Bucks-horn, Warded, *Cochlearia*
 Buck thorn, *Rhamnus*
 Buck-thorn, Sea, *Hippophaë*
 Buck wheat, *Polygonum*
 Bugbane, see Bogbean
 Bagle, *Ajuga*
 Bugloss, *Anchusa*
 Bugloss, Small wild, *Aperugo*
 Bugloss, Viper's, *Echium*
 Bullace Tree, *Chrysothylus*
 Bullace Tree, *Prunus*
 Burdock, *Arctium*
 Burdock, Lesser, *Xanthium*
 Burnet, Garden, *Poterium*
 Burnet, Greater wild, *Sanguisorba*
 Burnet Saxifrage, *Pimpinella*
 Burning thorny Plant, *Euphorbia*
 Burr Reed, *Sparganium*
 Butcher's Broom, *Ruscus*
 Butter Burr, *Tussilago*
 Butter-wort, *Pinguicula*
 Button Tree, *Conocarpus*
 Button Weed, *Spermacoce*
 Button Wood, *Cephalanthus*

C

Cabbage, *Brassica*
 Cabbage, Dog's, *Theligonum*
 Cabbage, Sea, *Crambe*
 Cabbage Tree, *Cacalia*
 Calabash, *Cucurbita*
 Calabash Tree, *Crescentia*
 Calamint, *Melissa*
 Calamint, Water, *Meniba*
 Cale, *Brassica*
 Cale, Sea, *Crambe*
 Caltrops, *Tribulus*
 Caltrops, Water, *Trapa*
 Calve's Snout, *Antirrhinum*
 Cammock, *Ononis*
 Campeachy Wood, *Hematoxylon*
 Camphire Tree, *Laurus*
 Champion, *Angrostema*
 Champion, *Lycnis*

Y 4

Champion,

- Campion, Viscous, *Silene*
 Canary-grass, *Phalaris*
 Candle of the Indians, see Kandel
 Candleberry Myrtle, *Myrica*
 Candy Carrot, *Athamanta*
 Candy Lion's Foot, *Catananche*
 Candy Tuft, *Iberis*
 Candy Tuft Tree, *Iberis*
 Cane or Reed, *Arundo*
 Cane, Sugar, *Saccharum*
 Canterbury Bells, *Campanula*
 Caper-bush, *Capparis*
 Caper, Bean, *Zygophyllum*
 Caraway, *Carum*
 Cardinal-flower, *Lobelia*
 Carlina Thistle, *Carlina*
 Carnation, *Dianthus*
 Carnation, Spanish, *Poinciana*
 Carnation Tree, *Cacalia*
 Carob Tree, *Ceratonia*
 Carrot, *Daucus*
 Carrot, Candy, *Athamanta*
 Carrot, Deadly, *Thapsia*
 Carui, *Carum*
 Cashew-nut, *Anacardium*
 Cassava, *Jatropha*
 Cassia, Poet's, *Osyris*
 Cassidy, *Gnapbalium*
 Cassiobury Bush, *Cassine*
 Catchfly, *Silene*
 Catmint, *Nepeta*
 Cat's-foot, *Glechoma*
 Cat's-foot Mountain, *Gnapbalium*
 Cat's-tail, *Typha*
 Caterpillars, *Scorpiurus*
 Cauliflower, *Brassica*
 Cedar, *Juniperus*
 Cedar of Jamaica, Bastard, *Theobroma*
 Cedar, White, *Cupressus*
 Cedar of Busaco, *Cupressus*
 Cedar of Libanus, *Pinus*
 Celandine, *Celidonium*
 Celandine, Lesser, *Ranunculus*
 Celandine Tree, *Bocconia*
 Celeriac, *Apium*
 Celery, *Apium*
 Centaury, *Centaurea*
 Centaury, Lesser, *Gentiana*
 Ceterach, *Asplenium*
 Chamomile, *Anthemis*
 Chardon, *Cynara*
 Charlock, *Sinapi*
 Charlock, White-flower'd, with
 jointed Pods, *Raphanus*
 Chaste Tree, *Vitex*
 Cheese Rennet, *Galium*
 Cherry, *Prunus*
 Cherry, Barbadoes, *Malpighia*
 Cherry, Bird, *Prunus*
 Cherry, Cornelian, *Cornus*
 Cherry, Dwarf, *Lonicera*
 Cherry, Hottentot, *Cassine*
 Cherry, Winter, *Physalis*
 Cherry, Winter, *Solanum*
 Cherry of the Alps, *Lonicera*
 Cherry Laurel, *Prunus*
 Chervil, Garden, *Scandix*
 Chervil, Wild, *Chærophyllum*
 Chestnut, *Fagus*
 Chestnut, Horse, *Æsculus*
 Chestnut, Indian Rose, *Mesua*
 Chich Pease, *Cicer*
 Chiches, *Cicer*
 Chichling Vetch, *Lathyrus*
 Chickweed, *Alfina*
 Chickweed, African, *Mollugo*
 Chickweed, Berry-bearing, *Cucubalus*
 Chickweed, Great, *Stellaria*
 Chickweed Mountain, *Moebringia*
 Chickweed, Mouse-ear, *Cerastium*
 Chickweed, Smallwater, *Montia*
 China Root, *Smilax*
 China Rose, *Hibiscus*
 Chinquapin, *Fagus*
 Chocolate-nut, *Theobroma*
 Christmas Rose, *Helleborus*
 Christopher, Herb, *Adæa*
 Christ's-thorn, *Rhamnus*

Chry -

- Chrysanthemum, Bastard, *Silphium*
 Chrysanthemum, Hard-seeded, *Osteospermum*
 Ciboules, *Allium*
 Cicely, Sweet, *Scandix*
 Cinnamon Tree, *Laurus*
 Cinnamon, White, *Laurus*
 Cinquefoil, *Potentilla*
 Cinquefoil, Marsh, *Comarum*
 Cistus, Marsh, *Ledum*
 Cistus, Lesser Marsh, *Andromeda*
 Cistus, Nettle-leaved, *Turnera*
 Cistus, Rape of, *Asarum*
 Citron, *Citrus*
 Citrul, *Cucurbita*
 Cives, *Allium*
 Clary, *Salvia*
 Clary, Pyrenean, *Horminum*
 Clivers, *Galium*
 Clove July Flower, *Dianthus*
 Clove Tree, *Caryophyllus*
 Clover, *Trifolium*
 Clover, Dutch, *Trifolium*
 Clown's, Allheal, *Stachys*
 Clown's Wound-wort, *Stachys*
 Cob-nut, *Corylus*
 Cock's-comb, *Celestia*
 Cock's-comb, *Pedicularis*
 Cock's-comb, Yellow, *Rhinanthus*
 Cock's-head, *Hedysarum*
 Cocoa-nut, *Cocos*
 Cocoa-plumb, *Chrysobalanus*
 Codlin Tree, *Pyrus*
 Codlins and Cream, *Epilobium*
 Coffee Tree, *Coffea*
 Cole-seed, *Brassica*
 Cole-rape, *Brassica*
 Cole-wort, *Brassica*
 Cole-wort, Sea, *Crambe*
 Cole-wort, Sea, *Convolvulus*
 Coloquintida, *Cucumis*
 Colt's-foot, *Tussilago*
 Colt's-foot, Alpine, *Cacalia*
 Colt's foot, Foreign, *Cacalia*
 Columbine, *Aquilegia*
 Columbine Feathered, *Thalictrum*
 Colutea, Jointed-podded, *Coronilla*
 Comphry, *Symphytum*
 Confound, Greater, *Symphytum*
 Confound, Lesser, *Bellis*
 Confound, Middle, *Ajuga*
 Confound, Royal, *Delphinium*
 Confound, Sarracen's, *Solidago*
 Confound, the True Saracen's, *Senecio*
 Contrayerva, *Dorstenia*
 Contrayerva of Hernandez, *Passiflora*
 Convall, Lily, *Convallaria*
 Coral Tree, *Eriobrya*
 Coriander, *Coriandrum*
 Cork Tree, *Quercus*
 Corn, Indian, *Zea*
 Corn Flag, *Gladiolus*
 Corn Marigold, *Chrysanthemum*
 Corn Parsley, *Sison*
 Corn Rocket, *Bunias*
 Corn Rose, *Papaver*
 Corn Salad, *Valeriana*
 Cornel Tree, *Cornus*
 Cornelian Cherry, *Cornus*
 Costmary, *Tanacetum*
 Cotton, *Gossypium*
 Cotton, Lavender, *Santolina*
 Cotton Tree, Silk, *Bombax*
 Cotton Grass, *Eriophorum*
 Cotton Weed, *Filago*
 Coventry Bells, *Campanula*
 Courbaril, *Hymenaea*
 Cowslip, *Primula*
 Cowslip, American, *Dodecatheon*
 Cowslip, Jerusalem, *Pulmonaria*
 Cowslip, Mountain, *Pulmonaria*
 Cow's Lungwort, *Verbascum*
 Cow Parsnep, *Heracleum*
 Cow Weed, *Chærophyllum*
 Cow Wheat, *Melampyrum*
 Coxcomb, see Cock's comb
 Crab Tree, *Pyrus*
 Crane.

Crake-berries, *Empetrum*
 Cranberries, *Vaccinium*
 Crane's Bill, *Geranium*
 Creeper, Virginian, *Hedera*
 Cress, *Lepidium*
 Cress, Indian, *Tropaeolum*
 Cress, Sciatica, *Iberis*
 Cress, Spanish, *Vella*
 Cress, Swines, *Cochlearia*
 Cress, Wall, *Turritis*
 Cress, Warted, *Cochlearia*
 Cress, Water, *Sisymbrium*
 Cross, Winter, *Erysimum*
 Cross, Jerusalem, *Lychnis*
 Cross, Knights, *Lychnis*
 Cross, Scarlet, *Lychnis*
 Cross-wort, *Valantia*
 Crowberries, *Empetrum*
 Crow-foot, *Ranunculus*
 Crown Imperial, *Fritillaria*
 Cuckow flower, *Cardamine*
 Cuckow Pint, *Arum*
 Cucumber, *Cucumis*
 Cucumber, Asses, *Momordica*
 Cucumber, Egyptian, *Momordica*
 Cucumber, Serpent, *Trichosanthes*
 Cucumber, Single-seeded, *Sicyos*
 Cucumber, Small creeping, *Melothria*
 Cucumber, Spirting, *Momordica*
 Cucumber, Wild, *Momordica*
 Cudweed, *Gnaphalium*
 Cudweed, Bastard, *Micropus*
 Cullions, *Orchis*
 Cullions, Soldier's, *Orchis*
 Cumin, *Cuminum*
 Cumin, Bastard, *Lagœcia*
 Cumin, Wild, *Lagœcia*
 Cup Mushroom, *Peziza*
 Curran Tree, *Ribes*
 Cushion Ladies, *Saxifraga*
 Cushion, Sea, *Statice*
 Custard, Apple, *Annona*
 Cypress, *Cupressus*
 Cypress, Summer, *Chenopodium*

D

Daffodil, *Narcissus*
 Daffodil, Lily, *Amaryllis*
 Daffodil, Lily, *Pancratium*
 Daffodil, Sea, *Pancratium*
 Daisy, *Bellis*
 Daisy, Blue, *Globularia*
 Daisy, Globe, *Globularia*
 Daisy, Greater, *Chrysanthemum*
 Daisy, Middle, *Doronicum*
 Daisy, Ox-eye, *Chrysanthemum*
 Dame's Violet, *Hesperis*
 Damson Tree, *Prunus*
 Damson Tree, *Chrysophyllum*
 Dandelion, *Leontodon*
 Dane-wort, *Sambucus*
 Darnel, *Lolium*
 Date Plumb, Indian, *Diospyros*
 Date Tree, *Phoenix*
 Day Lily, *Hemerocallis*
 Dead Nettle, *Lamium*
 Dead Nettle, Yellow, *Galeopsis*
 Deadly Carrot, *Thapsia*
 Deadly Nightshade, *Atropa*
 Devil in a Bush, *Nigella*
 Devil's Bit, *Scabiosa*
 Devil's Bit, Yellow, *Leontodon*
 Dewberry Bush, *Rubus*
 Dier's Broom, *Genista*
 Dier's Weed, *Reseda*
 Dier's Weed, *Genista*
 Dill, *Anethum*
 Distaff Thistle, *Atractylis*
 Distaff Thistle, *Carthamus*
 Dittander, *Lepidium*
 Dittany, *Origanum*
 Dittany, Bastard, *Marrubium*
 Dittany, White, *Diellamnus*
 Dock, *Rumex*
 Doctor Tinker's Weed, *Triosteum*
 Dodder, *Cuscuta*
 Dodder of Thyme, *Cuscuta*
 Dog's Bane, *Apocynum*
 Dog's Bane, *Asclepias*

Dog

Dog Berry, *Cornus*
 Dog's Cabbage, *Theligonum*
 Dog's Rue, *Scrophularia*
 Dog's Stones, *Orchis*
 Dog's Tooth, or Dog's Tooth
 Violet, *Erythronium*
 Dogwood, *Cornus*
 Dogwood of Jamaica, *Erythrina*
 Double Tongue, *Ruscus*
 Dove's Foot, *Geranium*
 Dragons, *Dracontium*
 Dragons, *Arum*
 Dragon's Head, *Dracocephalum*
 Dragons Water, *Calla*
 Dragon's Wort, *Artemisia*
 Dragon, Gum, see Tragacanth
 Dragon, Wild, *Artemisia*
 Drop-wort, *Spiraea*
 Drop-wort, Hemlock, *Oenanthe*
 Drop-water, *Oenanthe*
 Duck's-meat, *Lemna*
 Duck's-meat, Starry, *Callitriche*
 Duck's-foot, *Podophyllum*
 Dwale, *Atropa*

E

Ebony, Cretan, *Ebenus*
 Ebony, False, *Poinciana*
 Ebony of the Alps, *Cytisus*
 Ebony, Mountain, *Bauhinia*
 Edders, *Arum*
 Egg Plant, *Solanum*
 Eglantine, *Rosa*
 Elder Tree, *Sambucus*
 Elder, Marsh, *Viburnum*
 Elecampane, *Inula*
 Elecampane, Bastard, *Helenia*
 Elemi Tree, Gum, *Pistacia*
 Elephant's Foot, *Elephantopus*
 Elephant's Head, *Rhinanthus*
 Elichrysum, Bastard Ethiopian
 Stoebe
 Elm, *Ulmus*
 Enchanter's Nightshade, *Circæa*
 Endive, *Cichorium*

Eryngo, *Eryngium*
 Eschalot, *Allium*
 Eternal Flower, *Xeranthemum*
 Eternal Flower, *Gnaphalium*
 Eternal Flower, *Gomphrena*
 Evergreen, *Aizoon*
 Evergreen, *Sempervivum*
 Everlasting, *Xeranthemum*
 Everlasting, *Gomphrena*
 Everlasting, *Gnaphalium*
 Euonymus, Climbing, *Celastrus*
 Euonymus, Bastard, *Kiggellaria*
 Euonymus, Bastard, *Celastrus*
 Eye-bright, *Euphrosia*

F

Farting Tree, *Hura*
 Faufel Nut, *Arca*
 Felwort, *Gentiana*
 Felon-wort, *Solanum*
 Fennel, *Anethum*
 Fennel, Hog's, *Peucedanum*
 Fennel, Scorching, *Thapsia*
 Fennel, Sea, *Cribmum*
 Fennel Flower, *Nigella*
 Fennel Flower of Crete, *Garidella*
 Fennel Giant, *Ferula*
 Fenugreek, *Trigonella*
 Fern, Common Male, *Polypodium*
 Fern, Common Female, *Polypodium*
 Fern, Flowering, *Osmunda*
 Fern, Common or True Mules,
 Asplenium
 Fern, Mules, *Hemionitis*
 Fern, Sweet, *Scandix*
 Feverfew, *Matricaria*
 Feverfew, Bastard, *Parthenium*
 Fever-root, *Tristeum*
 Fever-weed, *Eryngium*
 Fiddle-wood, *Citharexylum*
 Field Basil, *Clenopodium*
 Field Basil, American, *Monarda*
 Field Basil, Syrian, *Ziziphora*
 Fig, *Ficus*
 Fig, Indian, *Cañus*

Fig,

- Fig, Infernal, *Argemone*
 Fig, Pharaoh's, *Ficus*
 Fig, Pharaoh's, *Musa*
 Fig, Marigold, *Meibryanthemum*
 Fig Tree, Cochineal, *Cactus*
 Fig-wort, *Scrophularia*
 Filberd, *Corylus*
 Fingrigo, *Pisonia*
 Finochia, *Anethum*
 Fir, *Pinus*
 Fir Moss, Upright, *Lycopodium*
 Fish Thistle, *Carduus*
 Flag, or Flag-flower, *Iris*
 Flag, Corn, *Gladiolus*
 Flag, Sweet-scented, *Acorus*
 Flax, *Linum*
 Flax, Carolina, *Polypremum*
 Flax, Toad, *Antirrhinum*
 Fleabane, *Conyza*
 Fleabane, Marsh, *Inula*
 Fleabane, Middle, *Inula*
 Fleabane, Shrubby African, *Tar-
chonanthus*
 Fleabane Tree, *Tarchonanthus*
 Flea-wort, *Plantago*
 Flix-weed, *Silybrium*
 Flower of Bristol, *Lychnis*
 Flower of Constantinople, *Lychnis*
 Flower Gentle, *Amaranthus*
 Flower of an Hour, *Hibiscus*
 Flower de Luce, *Iris*
 Flower-fence of Barbadoes, *Po-
inciana*
 Flower-fence, Bastard, *Adenan-
thera*
 Fluellin, *Antirrhinum*
 Fly Honeyfuckle, *Lonicera*
 Fly Honeyfuckle, African, *Hal-
lera*
 Fly Bane, *Silene*
 Fly-wort, *Silene*
 Fool's Parsley, *Aethusa*
 Fool's Stones, *Orchis*
 Four o'Clock Flower, *Mirabilis*
 Fox Glove, *Digitalis*
 Fox Tail Grass, *Alopecurus*
 Frankincense, Jews, *Styrax*
 Frankincense Tree, *Pinus*
 Fraxinella, *Diellamnus*
 French Bean, *Phaseolus*
 French Honeyfuckle, *Hedysarum*
 Fresh Water Soldier, *Stratiotes*
 Fryer's Cowl, *Arum*
 Fringe Tree, *Chionanthus*
 Fritillary, *Fritillaria*
 Fritillary Coxcomb, *Stapelia*
 Frog's Bit, *Hydrocharis*
 Fuller's Thistle, *Dipsacus*
 Fumatory, *Fumaria*
 Furze, *Ulex*
 Fustic Tree, *Morus*
- G
- Gale, or Sweet Gale, *Myrica*
 Galingale, *Cyperus*
 Garavances, *Cicer*
 Garlic, *Allium*
 Garlic Pear, *Crateva*
 Gatter Tree, *Cornus*
 Gelder Rose, *Viburnum*
 Gelder Rose, Curran-leav'd, *Spi-
raea*
 Gelder Rose, Virginian, *Spiraea*
 Gentian, *Gentiana*
 Gentian, Bastard, *Sarcotra*
 Gentianella, *Gentiana*
 Gentle, Flower, *Amaranthus*
 Gerard, Herb, *Aegopodium*
 Germander, *Teucrium*
 Germander, Rock, *Veronica*
 Germander, Water, *Teucrium*
 Gilead, False Baulm of, *Dra-
cephalum*
 Gill, *Glechoma*
 Gilly-flower, see July-flower
 Ginger, *Amumum*
 Ginseng, *Panax*
 Gladiole, Water, *Butomus*
 Gladiole, Water, *Lobelia*
 Gladwin, Stinking, *Iris*
- Glasf-

- Glass-wort, *Salvia*
 Glass-wort, Berry-bearing, *Ana-*
basis
 Glass-wort, Jointed, *Salicornia*
 Globe Amaranth, *Gomphrena*
 Globe Daisy, *Globularia*
 Globe Flower, *Sphaeranthus*
 Globe Ranunculus, *Trollius*
 Globe Thistle, *Echinops*
 Goat's Beard, *Tragopogon*
 Goat's Rue, *Galga*
 Goat's Stones, greater, *Satyrion*
 Goat's Stones, lesser, *Orchis*
 Goat's Thorn, *Astragalus*
 Gold of Pleasure, *Myagrum*
 Golden Cups, *Ranunculus*
 Golden Lung-wort, *Hieracium*
 Golden Maidenhair, *Polytrichum*
 Golden Mouse-ear, *Hieracium*
 Golden Rod, *Solidago*
 Golden Rod Tree, *Besia*
 Golden Samphire, *Inula*
 Golden Saxifrage, *Chrysosplenium*
 Golden Thistle, *Scolymus*
 Goldy Locks, *Chrysocoma*
 Goldy Locks, *Gnaphalium*
 Good Henry, *Chenopodium*
 Gooseberry, *Ribes*
 Gooseberry, American, *Mela-*
stoma
 Gooseberry of the Americans,
Cactus
 Gooseberry of Barbadoes, *Cactus*
 Goose-foot, *Chenopodium*
 Goose Grass, *Galium*
 Goose Grass, great, *Asperugo*
 Goose Tongue, *Achillea*
 Go to bed at Noon, *Tragopogon*
 Gorse, *Ulex*
 Gourd, *Cucurbita*
 Gourd, Bitter, *Cucumis*
 Gourd, Ethiopian Sour, *Alan-*
jonia
 Gourd Tree, Indian, *Crescentia*
 Gout-wort, *Egopodium*
 Grace, Herb of, *Ruta*
 Grain, Oily Purgings, *Sesamum*
 Grain, Scarlet, *Quercus*
 Grain, Scarlet, *Cactus*
 Grape, *Vitis*
 Grape, Mangrove, *Polygonum*
 Grape, Sea-side, *Polygonum*
 Grape Hyacinth, *Hyacinthus*
 Grass of Parnassus, *Parnassia*
 Grass Vetch, Crimson, *Lathyrus*
 Grass Wrack, *Zostera*
 Gravel-bind, *Convolvulus*
 Greek Valerian, *Polemonium*
 Green-weed, *Genista*
 Grim the Collier, *Hieracium*
 Gromwell, or Gromil, *Litho-*
spermum
 Gromwell, German, *Stellera*
 Ground Ivy, *Glechoma*
 Ground Nut, *Arachis*
 Ground Pine, *Tucrium*
 Ground Pine, Stinking, *Cam-*
phoresma
 Groundsel, *Senecio*
 Groundsel Tree, *Baccharis*
 Groundsel Tree with a Ficoides
 Leaf, *Cacalia*
 Guava, see Guayava
 Guava, French, *Cassia*
 Guayava, *Psidium*
 Gum Elemi Tree, *Pistachia*
 Gum Succory, *Chondrilla*
 Gum Tragacanth, *Astragalus*
 Gum, Sweet, *Liquidambar*

H

- Hairbells, *Hyacinthus*
 Hare's-ear, *Bupleurum*
 Hare's-ear, Bastard, *Phyllis*
 Hare's Lettuce, *Sonchus*
 Hart's-horn Plantain, *Plantago*
 Hart's-tongue, *Asplenium*
 Hart-wort, *Seseli*
 Hart-wort of Crete, *Tordylium*
 Hart-

- Hartwort, Shrubby, of Ethiopia, Hemlock, Great broad-leaved
Bupleurum Bastard, *Ligusticum*
Hart-wort of Marseilles, *Seseli* Hemlock, Lesser, *Aethusa*
Hatchet Vetch, True, *Coronilla* Hemlock, Water, *Cicuta*
Hatchet Vetch, Clusius's Foreign, Hemlock Drop-wort, *Oenanthe*
Biserrula Hemp, *Cannabis*
Hawk-weed, *Hieracium* Hemp, Bastard, *Datisca*
Hawk-weed, Bastard, *Crepis* Hemp, Bastard, *Galeopsis*
Hawk-weed, Trailing crooked-seeded, *Hyoseris* Hemp Agrimony, *Eupatorium*
Hawk-weed, Woolly, *Andryala* Hemp Agrimony, Bastard, *Ageratum*
Hawthorn, or Haw, *Crataegus* Hemp Agrimony, Naked-headed, *Verbena*
Hawthorn, Black American, *Viburnum* Hemp Agrimony, Water, *Bidens*
Hay, Burgundian, *Medicago* Henbane, *Hyoscyamus*
Hazel, or Hazel Nut, *Corylus* Henbane, Yellow, *Nicotiana*
Hazel, Witch, *Hamamelis* Henweed, Guinea, *Petiveria*
Hazel, Witch, *Ulmus* Hepatica, *Anemone*
Heart Pea, *Cardiospermum* Hep Tree, *Rosa*
Heart Seed, *Cardiospermum* Herb Bane, *Orobancha*
Heart's Ease, *Viola* Herb Bane, Great Purple, *Lactuca*
Heath, *Erica* Herb Bennet, *Geum*
Heath, Berry-bearing, *Empetrum* Herb Christopher, *Aster*
Heath, Black berried, *Empetrum* Herb Gerard, *Egopodium*
Heath, Mountain, *Saxifraga* Herb of Grace, *Ruta*
Heath, Low Pine, *Coris* Herb Mastick, *Satureia*
Heath Pease, *Orobus* Herb Paris, *Paris*
Hedge Hog, *Medicago* Herb Paris of Canada, *Trillium*
Hedge Hog Thistle, *Cactus* Herb Robert, *Geranium*
Hedge Hog Thorn, Spanish *Anthyllis* Herb Trinity, *Viola*
Hedge Hyssop, *Gratiola* Herb Truelove, *Paris*
Hedge Mustard, *Erysimum* Herb Truelove of Canada, *Trillium*
Hedge Nettle, *Galeopsis* Herb Two-pence, *Lysimachia*
Hedge Nettle, Shrubby, *Prasium* Herb, Blessed, *Geum*
Hellebore, *Helleborus* Herb, Saint Bartholomew's, *Ilex*
Hellebore, Bastard, *Scrapias* Herb, Willow, *Epilobium*
Hellebore, Black, *Helleborus* Herb, Willow, *Lythrum*
Hellebore, Fennel-leaved Black, *Adonis* Herb, Willow, *Lysimachia*
Hellebore, White, *Veratrum* Hercules's Allheal, *Pastinaca*
Helleborine, *Scrapias* Hercules's Allheal, *Heracleum*
Helmet-flower, *Aconitum* Hercules's Club, *Zanthoxylon*
Hemlock, *Cenium* Hic-

Hicory Nut, *Juglans*
 High Taper, *Verbascum*
 Hind-berry, *Rubus*
 Hog Plumb-tree, *Spondias*
 Hog's Fennel, *Peucedanum*
 Hogweed of the Americans,
Boerhaavia

Hollow Root, *Adoxa*

Holly, *Ilex*

Holly, Knee, *Ruscus*

Holly, Sea, *Eryngium*

Hollyhock, *Alcea*

Holy Thistle, *Cnicus*

Honesty, *Lunaria*

Hone-wort, *Sison*

Honey-flower, *Melianthus*

Honey Locust, *Gleditsia*

Honeysuckle, *Lonicera*

Honeysuckle, African Fly, *Hal-*
leria

Honeysuckle, American Upright, *Jacobæa*
Azalea

Honeysuckle, French, *Hedysarum*

Honeysuckle Grass, *Trifolium*

Honey-wort, *Cerinth*

Hop, *Humulus*

Hop-tree, *Ilex*

Horehound, *Marrubium*

Horehound, Base, *Stachys*

Horehound, Bastard, *Sideritis*

Horehound, Black, *Ballota*

Horehound, Stinking Marsh Ba-
 stard, *Glechoma*

Horehound, Water, *Lycopus*

Hornbeam, *Carpinus*

Horns, *Medicago*

Horse Chestnut, *Æsculus*

Horse Purslane, *Triantema*

Horse Radish, *Cochlearia*

Horse-shoe Vetch, *Hippocrepis*

Horse-tail, *Equisetum*

Horse-tail, Shrubby, *Ephedra*

Horse-tongue, *Ruscus*

Hottentot Cherry, *Cassine*

Hound's-tongue, *Cynoglossum*

Houfeleek, *Sempervivum*

Houfeleek, Lesser, *Sedum*

Houfeleek, Small annual, *Tillæa*

Houfeleek, Water, of Egypt,
Pistia

Hyacinth, *Hyacinthus*

Hyacinth, African Blue umbel-
 lated, *Crinum*

Hyacinth, Lily, *Scilla*

Hyacinth, Peruvian, *Scilla*

Hyacinth, Starry, *Scilla*

Hyssop, *Hyssopus*

Hyssop, Hedge, *Gratiola*

Hyssop, Mountain, *Thymbra*

I

Jacinth, *Hyacinthus*

Jack in a Box, *Hernandia*

Jack by the Hedge, *Erysimum*

Jacob's Ladder, *Polemonium*

Jacobæa Lily, *Amaryllis*

Jalap, *Mirabilis*

Jasmine, *Jasminum*

Jasmine, Arabian, *Nyctanthes*

Jasmine, Bastard, *Cestrum*

Jasmine, Bastard, *Lycium*

Jasmine, Ilex-leaved, *Lantana*

Jasmine, Fennel-leaved, *Ipomoea*

Jasmine, Persian, *Syringa*

Jasmine, Red, *Plumeria*

Jasmine, Scarlet, *Bignonia*

Jasmine, Yellow, *Bignonia*

Jericho, Rose of, *Anastatica*

Jersey, Thea, New, *Ceanothus*

Jerusalem Artichoke, *Helianthus*

Jerusalem Cowslip, *Pulmonaria*

Jerusalem Cross, *Lycnis*

Jerusalem Oak, *Chenopodium*

Jerusalem Sage, *Plomis*

Jerusalem, Sage of, *Pulmonaria*

Jessamine, see Jasmine

Jesuits Bark-tree, True, *Cinchona*

Jesuits Bark-tree, False, *Iva*

Jew's Frankincense, *Syrax*

Jew's Mallow, *Corchorus*

Ilathera,

Ilathera Bark, *Clusia*
 Immortal Eagle flower, *Impatiens*
 Immortal flower, *Gomphrena*
 Indian God Tree, *Ficus*
 Indian Shot, *Canna*
 Indigo, *Indigofera*
 Indigo, Bastard, *Amorpha*
 Infernal Fig, *Argemone*
 Job's Tears, *Coix*
 Johnsonia, *Callicarpa*
 Jonquill, *Narcissus*
 Ipecacuana, Bastard, *Asclepias*
 Ipecacuana, False, *Triosteum*
 Iris Uvaria, *Aletis*
 Iron-wood, *Sideroxylum*
 Iron-wort, *Sideritis*
 Judas-tree, *Circis*
 Jujube-tree, *Rhamnus*
 July-flower, Clove, *Dianthus*
 July-flower, Queen's, *Hesperis*
 July-flower, Stock, *Cheiranthus*
 Juniper, *Juniperus*
 Jupiter's Beard, *Anthyllis*
 Jupiter's Beard, American, *Amorpha*
 Jupiter's Distaff, *Salvia*
 Ivy, *Hedera*
 Ivy, Bindweed-leaved, *Menispermum*
 Ivy, Ground, *Glechoma*
 Ivy-tree of America, *Kalmia*

K

Kale, Sea, *Crambe*
 Kali, *Salsola*
 Kali, Egyptian, *Mesembryanthemum*
 Kali, Sal, *Salicornia*
 Kandel of the Indians, *Rhizophora*
 Kelp, *Salicornia*
 Kermes, *Quercus*
 Kidney Bean, *Phaseolus*
 Kidney Bean-tree of Carolina, *Glycine*

Kidney Vetch, *Anthyllis*
 Kidney-wort, *Saxifraga*
 King's Spear, *Asphodelus*
 Knapweed, *Centaurea*
 Knapweed, Thorny, *Centaurea*
 Knawel, *Scleranthus*
 Knee Holly, *Ruscus*
 Knee Holm, *Ruscus*
 Knight's Cross, *Lycchnis*
 Knot Berries, *Rubus*
 Knot Grass, *Polygonum*
 Knot Grass, German, *Scleranthus*
 Knot Grass, Mountain, *Illecebrum*
 Knotgrass, Verticillate, *Illecebrum*

L

Laburnum, *Cytisus*
 Ladder to Heaven, *Convolvularia*
 Ladder, Jacob's, *Polemonium*
 Lady's Bedstraw, *Galium*
 Lady's Bower, *Clematis*
 Lady's Comb, *Scandix*
 Lady's Cushion, *Saxifraga*
 Lady's Finger, *Anthyllis*
 Lady's Mantle, *Alchemilla*
 Lady's Seal, *Tamus*
 Lady's Slipper, *Cypripedium*
 Lady's Smock, *Cardamine*
 Lady's Traces, Triple, *Ophrys*
 Lakeweed, *Polygonum*
 Lamb's Lettuce, *Valeriana*
 Larch-tree, *Pinus*
 Lark's Heel, *Delphinium*
 Lark's Spur, *Delphinium*
 Laserwort, *Laserpitium*
 Lavender, *Lavandula*
 Lavender, Sea, *Statice*
 Lavender Cotton, *Santolina*
 Laurel, *Prunus*
 Laurel, Alexandrian, *Ruscus*
 Laurel, Dwarf, of America, *Kalmia*
 Laurel, Flax-leaved, *Daphne*
 Laurel, Sea-side, *Phyllanthus*
 Laurel, Spurge, *Daphne*

Laurus.

- Laurustinus, *Viburnum*
 Lauskraut, *Delphinium*
 Lead-wort, *Plumbago*
 Leather-wood, *Dirca*
 Leek, *Allium*
 Lemon, *Citrus*
 Lemon, Water, *Passiflora*
 Lentils, *Ervum*
 Lentisk, *Pistacia*
 Lentisk, African, *Schinus*
 Lentisk, Peruvian, *Schinus*
 Leopard's Bane, *Doronicum*
 Lettuce, *Lactuca*
 Lettuce, Hare's, *Sonchus*
 Lettuce, Lamb's, *Valeriana*
 Lettuce, Wild, *Prenanthes*
 Life, Tree of, *Thuja*
 Life, Wood of, *Guaiacum*
 Life Everlasting, *Gnaphalium*
 Lignum Aloes, *Cordia*
 Lignum Vitæ, *Guaiacum*
 Lilac, *Syringa*
 Lily, *Lilium*
 Lily, African Scarlet, *Amaryllis*
 Lily, Asphodel, *Crinum*
 Lily, Atamasco, *Amaryllis*
 Lily, Belladonna, *Amaryllis*
 Lily, St. Bruno's, *Hemerocallis*
 Lily, Conval, *Convallaria*
 Lily, Day, *Hemerocallis*
 Lily, Guernsey, *Amaryllis*
 Lily, Jacobæa, *Amaryllis*
 Lily, Japan, *Amaryllis*
 Lily, May, *Convallaria*
 Lily, Mexican, *Amaryllis*
 Lily, Persian, *Fritillaria*
 Lily, Superb, *Gloriosa*
 Lily, Water, *Nymphaea*
 Lily, Lesser Yellow Water, with
 fringed Flowers, *Menyanthes*
 Lily, Zeylon, *Amaryllis*
 Lily, Asphodel, *Hemerocallis*
 Lily, Daffodil, *Amaryllis*
 Lily, Daffodil, *Pancratium*
 Lily, Hyacinth, *Scilla*
 Lily, Thorn, *Catesbæa*
 Lily of the Valley, *Convallaria*
 Lime, *Citrus*
 Lime, Brook, *Veronica*
 Lime-tree, *Tilia*
 Linden-tree, *Tilia*
 Lion's-foot, Candy, *Catananche*
 Lion's-leaf, *Leontice*
 Lion's tail, *Leonurus*
 Lipplehout, *Cassine*
 Liquorice, *Glycyrrhiza*
 Liquorice, Wild, *Astragalus*
 Liquorice, Wild, *Capraria*
 Liquorice, Wild, *Glycine*
 Liquorice Vetch, *Astragalus*
 Liquorice Vetch, Knobbed-
 rooted, *Glycine*
 Live-ever, *Sedum*
 Live-long, *Sedum*
 Liver-wort, *Lichen*
 Liver-wort, Marsh, *Riccia*
 Liver-wort, Noble, *Anemone*
 Lizard's-tail, *Saururus*
 Lizard's-tail, *Piper*
 Loblolly Bay, *Gordonia*
 Locker Gowlands, *Trollius*
 Locust, *Melanthus*
 Locust, *Ceratonia*
 Locust, Ballard, *Hymenæa*
 Locust-tree, *Hymenæa*
 Locust-tree, *Robinia*
 Locust-tree, Honey, *Gleditsia*
 Logwood, *Hæmatoxylon*
 London Pride, *Saxifraga*
 Loose-strife, *Lyfimachia*
 Loose-strife, podded, *Epilobium*
 Loose-strife, Purple, *Lytbrum*
 Loose-strife, Spiked, *Lytbrum*
 Loose-strife, Yellow Virginian,
Gaura
 Lords and Ladies, *Arum*
 Lotus, or Lote-tree, *Celtis*
 Lotus, supposed, of Homer, *Dio-
 spyros*
 Lotus, Honey, *Trifolium*
 Lovage, *Ligusticum*
 Love, Tree of, *Cercis*
 Love Apple, *Solanum*
 Z.
 Love

Love in a Mist, <i>Passiflora</i>	Mallow, Yellow, <i>Sida</i>
Love lies a bleeding, <i>Amaranthus</i>	Mammee, <i>Mammea</i>
Loufe-wort, <i>Pedicularis</i>	Mammee Sapota, <i>Acbras</i>
Loufe-wort, Yellow, <i>Rhinanthus</i>	Manchineel-tree, <i>Hippomane</i>
Lucern Grass, <i>Medicago</i>	Mandrake, <i>Mandragora</i>
Lung-wort, <i>Pulmonaria</i>	Mango-tree, <i>Mangifera</i>
Lung-wort, Cow's, <i>Verbascum</i>	Mangostan, or Mangosteent, <i>Garciana</i>
Lung-wort, Golden, <i>Hieracium</i>	Mangrove Grape, <i>Polygonum</i>
Lupine, <i>Lupinus</i>	Mangrove-tree of America, <i>Rhizophora</i>
Lust-wort, <i>Drosera</i>	Manihot, <i>Jatropha</i>
Lychnidea, <i>Pblex</i>	Maple, <i>Acer</i>
Lychnis, Bastard, <i>Pblex</i>	Maracock, <i>Passiflora</i>
Lychnis, Wild, <i>Agrostema</i>	Marigold, <i>Calendula</i>

M

Mace, Reed, <i>Typha</i>	Marigold, African, <i>Tagetes</i>
Mad Apple, <i>Solanum</i>	Marigold, Corn, <i>Chrysanthemum</i>
Madder, <i>Rubia</i>	Marigold, Frig, <i>Mesembryanthemum</i>
Madder, Little Field, <i>Sberardia</i>	Marigold, French, <i>Tagetes</i>
Madder, Petty, <i>Crucianella</i>	Marigold, Marsh, <i>Caliba</i>
Mad-wort, <i>Alyssum</i>	Marjoram, common or sweet, <i>Origanum</i>
Mad-wort, German, <i>Asperugo</i>	Marjoram, Bastard, <i>Origanum</i>
Mahaleb, <i>Prunus</i>	Margoram, Pot, <i>Origanum</i>
Maho-tree, <i>Hibiscus</i>	Marjoram, Spanish, <i>Urtica</i>
Maiden-hair, <i>Adiantum</i>	Marjoram, Wild, <i>Origanum</i>
Maiden-hair, English black, <i>Asplenium</i>	Marjoram, Winter sweet, <i>Origanum</i>
Maiden hair, Golden, <i>Polytrichum</i>	Marsh-mallow, see Mallow
Maiden-hair, White, <i>Asplenium</i>	Martagon, <i>Lilium</i>
Maiden Plum, <i>Chrysobalanus</i>	Marvel of Peru, <i>Mirabilis</i>
Malabar Nut, <i>Jussicia</i>	Marum, Common, <i>Satureia</i>
Male Balsam Apple, <i>Momordica</i>	Marum, Pennyroyal-scented, <i>Melissa</i>
Mallow, <i>Malva</i>	Marum, Syrian or Cretan, <i>Origanum</i>
Mallow, Bastard, <i>Malope</i>	Master-wort, <i>Imperatoria</i>
Mallow, Jew's, <i>Corchorus</i>	Master-wort, Black, <i>Astrantia</i>
Mallow, Indian, <i>Sida</i>	Mastich, Herb, <i>Saturcia</i>
Mallow, Indian, <i>Urena</i>	Mastich, Indian, <i>Schinus</i>
Mallow, Marsh, <i>Albæa</i>	Mastich, Peruvian, <i>Schinus</i>
Mallow, Rose, <i>Alcea</i>	Mastich-tree, <i>Pistachia</i>
Mallow, Syrian, <i>Hibiscus</i>	Mastich-tree, Indian, <i>Schinus</i>
Mallow, Tree, <i>Lavatera</i>	Mastich Thyme, <i>Satureia</i>
Mallow, Varied leav'd, <i>Lavatera</i>	Mastich Thyme, <i>Thymus</i>
Mallow, Venetian, <i>Lavatera</i>	
Mallow, Vervain, <i>Malva</i>	

Mat-

- Matfellow, *Centaurea*
 Mat-weed, Hooded, *Lygeum*
 Maudlin, *Achillea*
 May Apple, *Podophyllum*
 May Bush, *Crataegus*
 May Lily, *Convallaria*
 May Weed, *Anthemis*
 Mays, *Zea*
 Meadia, *Dodecatheon*
 Meadow Rue, *Thalictrum*
 Meadow Saffron, *Colchicum*
 Meadow Saxifrage, *Peucedanum*
 Meadow-sweet, *Spiraea*
 Meadow-sweet, Greater, *Spiraea*
 Meadow, Queen of the, *Spiraea*
 Mealy-tree, Pliant, *Viburnum*
 Medic, *Medicago*
 Medic, Bastard, *Medicago*
 Medic, Sea, *Medicago*
 Medic, Vetch, *Hedysarum*
 Medic, Vetchling, *Hedysarum*
 Medlar, *Mespilus*
 Medusa's Head, *Euphorbia*
 Melancholy Thistle, *Carduus*
 Melancholy-tree, *Nyctanthes*
 Melilot, *Trifolium*
 Melilot Trefoil, *Trifolium*
 Melon, *Cucumis*
 Melon, Water, *Cucurbita*
 Melon-thistle, *Cactus*
 Mercury, *Mercurialis*
 Mercury, English, *Chenopodium*
 Mezereon, *Daphne*
 Meu, *Athamanta*
 Mignonette, *Reseda*
 Milfoil, *Achillea*
 Milfoil, Water, *Hottonia*
 Milfoil, Water, *Myriophyllum*
 Milfoil, Water, *Utricularia*
 Milk Vetch, *Astragalus*
 Milk Vetch, Bastard, *Phaca*
 Milk Wood, *Bignonia*
 Milk wort, *Polygala*
 Milk-wort, *Euphorbia*
 Milk-wort, Sea, *Glaux*
 Millet, *Panicum*
 Millet-grass, *Milium*
 Millet, Indian, *Holcus*
 Milt-waste, *Asplenium*
 Mint, *Mentha*
 Mint, Cat, *Nepeta*
 Mistletoe, *Viscum*
 Mithridate Mustard, *Thlaspi*
 Mithridate Mustard, Bastard, *Iberis*
 Mock Orange, *Philadelphus*
 Mock Privet, *Phillyrea*
 Moldavian Baulm, *Dracocephalum*
 Molucca Baulm, *Moluccella*
 Moly with Lily-flowers, or Homer's, *Allium*
 Money-wort, *Lyfimachia*
 Monk's-head, *Leontodon*
 Monk's-hood, *Aconitum*
 Monk's Rhubarb, *Rumex*
 Monster, *Fritillaria*
 Moon Seed, *Menispermum*
 Moon Trefoil, *Medicago*
 Moon-wort, *Lunaria*
 Moor Berries, *Vaccinium*
 Moschatel, Tuberoze, *Adoxa*
 Moss-tree, *Lichen*
 Moss, Upright Fir, *Lycopodium*
 Moss, Water, *Fontinalis*
 Moss-berries, *Vaccinium*
 Moth Mullein, *Verbascum*
 Mother of Thyme, *Thymus*
 Mother-wort, *Leonurus*
 Mouse-ear, *Hieracium*
 Mouse-ear, Creeping, *Hieracium*
 Mouse-ear, Golden, *Hieracium*
 Mouse-ear Chickweed, *Cerastium*
 Mouse-ear Scorpion-grass, *Myosotis*
 Mouse-tail, *Myosurus*
 Mug-wort, *Artemisia*
 Mulberry-tree, *Morus*
 Mulberry Blite, *Blitum*
 Mule Fairchild's, *Dianthus*
 Mule-wort, *Hemionitis*
 Mule's Fern, *Hemionitis*

Mullein, *Verbascum*
 Mullein, Moth, *Verbascum*
 Mushrooms, *Agaricus*
 Mushrooms, Cup, *Peziza*
 Musk Seed, *Hibiscus*
 Mustard, *Sinapis*
 Mustard, Bastard, *Cleome*
 Mustard, Buckler, *Biscutella*
 Mustard, Hedge, *Erysimum*
 Mustard, Mithridate, *Tblaspi*
 Mustard, Bastard Mithridate,
Iberis
 Mustard, Tower, *Tarritis*
 Mustard, Bastard Tower, *Arabis*
 Mustard, Treacle, *Chypeola*
 Mustard Treacle, *Tblaspi*
 Myrtle, *Myrtus*
 Myrtle, Candleberry, *Myrica*
 Myrtle, Dutch, *Myrica*

N

Naked Ladies, *Colchicum*
 Naples, Star of, *Ornithogalum*
 Narcissus, Third, of Matthiolus,
Pancratium
 Naseberry-tree, *Sioantea*
 Navel wort, *Cotyledon*
 Navel-wort, Bastard, *Crassula*
 Navel-wort, False, *Crassula*
 Navel-wort, Venus's, *Cynoglossum*
 Navel-wort, Water, *Hydrocotyle*
 Navew, *Brassica*
 Nectarine, *Amygdalus*
 Nep, *Nepeta*
 Nettle, *Urtica*
 Nettle, Dead, *Lamium*
 Nettle, Hedge, *Galeopsis*
 Nettle, Shrubby Hedge, *Prasum*
 Nettle-tree, *Celtis*
 Nickar-tree, *Guilandina*
 Nightshade, *Solanum*
 Nightshade, American, *Phytolacca*
 Nightshade, American, *Rivina*
 Nightshade, Bastard, *Rivina*

Nightshade, Deadly, *Atropa*
 Nightshade, Enchanter's, *Circaea*
 Nightshade, Malabar, *Basella*
 Nightshade, Three-leaved, *Trilium*
 Nipple-wort, *Lapsana*
 Noli me tangere, *Impatiens*
 Noli me tangere, *Momordica*
 None so pretty, *Saxifraga*
 Nonsuch, *Lychnis*
 Nose-bleed, *Achillea*
 Nut-tree, *Corylus*
 Nut, Bladder, *Staphylaea*
 Nut, Cashew, *Anacardium*
 Nut, Chocolate, *Theobroma*
 Nut, Cob, *Corylus*
 Nut, Cocoa, *Cocos*
 Nut, Earth, *Bunium*
 Nut, Faufel, *Arca*
 Nut, Ground, *Arabis*
 Nut, Hazel, *Corylus*
 Nut, Malabar, *Jussicia*
 Nut, Pease Earth, *Lathyrus*
 Nut, Physic, *Jatropha*
 Nut, Physic, *Croton*
 Nut, Pig, *Bunium*
 Nut, Pistacia, *Pistacia*
 Nut, Purging, *Croton*
 Nut, Purging, *Jatropha*
 Nut, Spanish, *Iris*
 Nut, Walnut, *Juglans*

O

Oak, *Quercus*
 Oak, Dwarf, *Teucrium*
 Oak of Cappadocia, *Ambrosia*
 Oak of Jerusalem, *Chenopodium*
 Oak, Poison, *Rhus*
 Oats, *Avena*
 Oats, Seaside, of Carolina, *Uniola*
 Oats, Wild-bearded, *Bromus*
 Oat-grass, *Bromus*
 Oil Nut, *Ricinus*
 Oil Seed, *Ricinus*

Oil

Oil-tree, *Ricinus*
 Oily Purging Grain, *Sesamum*
 Okra, *Hibiscus*
 Old Man's Beard, *Clematis*
 Old Man's Head, *Dianthus*
 Oleander, *Nerium*
 Oleaster, *Elæagnus*
 Olive, *Olea*
 Olive, Spurge, *Daphne*
 Olive, Wild, *Elæagnus*
 Olive, Wild, of Barbadoes,
Bontia
 One Berry, *Paris*
 One Blade, *Convallaria*
 Onion, *Allium*
 Onion, Sea, *Scilla*
 Orange, *Citrus*
 Orange, Mock, *Philadelphus*
 Origan, *Origanum*
 Oroonoka, *Nicotiana*
 Orpine, *Sedum*
 Orpine, Bastard, *Adrachne*
 Orpine, Lesser, *Crassula*
 Orpine, True, of Imperatus,
Telephium

Orrach, *Atriplex*
 Orrach, Berry-bearing, *Blitum*
 Orrach, Creeping shrubby, *Atraphaxis*
 Orrach, Wild, *Ctenopodium*
 Osier, *Salix*
 Osmund Royal, *Osmunda*
 Ox-eye, *Buphratum*
 Ox-eye of old Authors, *Antemiss*
 Ox-eye Daisy, *Chrysanthemum*
 Ox-lips, *Primula*
 Ox-tongue, *Picris*
 Oswego Tea, *Monarda*

P

Pæony, *Pæonia*
 Pagils or Paigles, *Primula*
 Painted Ladies, *Dianthus*
 Painted Lady Pease, *Lathyrus*

Palm, Common or Greater, or
 Date-tree, *Phoenix*
 Palm, Lesser or Dwarf, *Chamaerops*
 Palm, The Cocoa Nut, *Cocos*
 Palm, The Fausel Nut, *Areca*
 Palm, Malabar, called Ampana
 and Carimpana, *Borassus*
 Palm, Wild Malabar, called Ka-
 rou Indel, *Elate*
 Palm. Mountain, with largest
 Leaves, called Codda Pan-
 na, *Corypha*
 Palm with ringed Stems, called
 Todda Panna, *Cycas*
 Palm with bipinnate Leaves, call-
 ed Schunda Panna, *Caryota*
 Palma Christi, *Ricinus*
 Palmetto, *Chamaerops*
 Panic, *Panicum*
 Panic-grass, *Panicum*
 Pansies, *Viola*
 Papaw-tree, *Carica*
 Papaw-tree of North America,
Annona

Paraguay Tea, *Ilex*
 Park-leaves, *Hypericum*
 Parsley, *Apium*
 Parsley, Bastard, *Caucalis*
 Parsley, Corn, *Sison*
 Parsley, Fool's, *Æruba*
 Parsley, Macedonian, *Bubon*
 Parsley, Milky, *Selinum*
 Parsley, Mountain, *Athamanta*
 Parsley, Stone, *Bubon*
 Parsley, Bastard Stone, *Sison*
 Parsley, Wild, *Sison*
 Parsley, Wild, of America, *Cardiospermum*
 Parsley, Break-stone, *Aphanes*
 Parsley Piert, *Aphanes*
 Parsnep, *Pastinaca*
 Parsnep, Cow's, *Heracleum*
 Parsnep, Prickly, *Echinophora*
 Parsnep, Water, *Sium*

Z 3

Par.

- Parnassus, Grass of, *Parnassia*
 Pasque-flower, *Anemone*
 Passion-flower, *Passiflora*
 Patience, *Rumex*
 Paul's Betony, *Veronica*
 Pea, *Pisum*
 Pea, Chick, *Cicer*
 Pea, Chichling, *Lathyrus*
 Pea, Earth-nut, *Lathyrus*
 Pea, Everlasting, *Lathyrus*
 Pea, Heart, *Cardiospermum*
 Pea, Heath, *Orobis*
 Pea, Painted Lady, *Lathyrus*
 Pea, Pigeon, *Cytisus*
 Pea, Sweet-scented, *Lathyrus*
 Pea, Tangier, *Lathyrus*
 Pea, Winged, *Lotus*
 Pea, Wild Winged, *Pisum*
 Pea, Wood, *Orobis*
 Peach, *Amygdalus*
 Peach, Wolf's, *Solanum*
 Pear, *Pyrus*
 Pear, Avocado, Avocado or Al-
 ligator, *Laurus*
 Pear, Batchelor's, *Solanum*
 Pear, Garlick, *Cratæva*
 Pear, Prickly, *Cactus*
 Pellitory, *Parietaria*
 Pellitory, Bastard, *Achillea*
 Pellitory, Double, *Achillea*
 Pellitory of Spain, *Anthemis*
 Pellitory of Spain, False, *Cbry-*
 santhemum
 Pellitory-tree, *Zanthoxylum*
 Pellitory of the Wall, *Parietaria*
 Penny-royal, *Mentha*
 Penny-royal, Virginian, *Satureia*
 Penny-wort, Marsh, *Hydrocotyle*
 Penny-wort, Wall, *Cotyledon*
 Penny-wort, Water, *Hydrocotyle*
 Penguin, *Bromelia*
 Pentstemon, *Cbelone*
 Peony, see *Pæony*
 Pepper, *Piper*
 Pepper, Barbary, *Capficum*
 Pepper, Bell, *Capficum*
 Pepper, Bird, *Capficum*
 Pepper, Bonnet, *Capficum*
 Pepper, Guinea, *Capficum*
 Pepper, Jamaica, *Myrtus*
 Pepper, Indian, *Capficum*
 Pepper, Long, *Piper*
 Pepper, Poor Man's, *Lepidium*
 Pepper, Wall, *Sedum*
 Pepper, Water, *Polygonum*
 Pepper-grass, *Pilularia*
 Pepper-pot, *Capficum*
 Pepper-tree, *Vitis*
 Pepper-wort, *Lepidium*
 Percepier, *Apbanes*
 Periwinkle, *Vinea*
 Perficaria, *Polygonum*
 Persimon Plum, see *Pishamin*
 Pestilent-wort, *Tussilago*
 Petroseline Wortle, *Apium*
 Petty Madder, *Crucianella*
 Petty Whin, *Ononis*
 Pharoah's Fig, *Musa*
 Pharoah's Fig, *Ficus*
 Pheasant's Eye, *Adonis*
 Phyllyrea, False, *Rhamnus*
 Phu, *Valeriana*
 Physic, Nut, *Jatropha*
 Physic, Nut, *Croton*
 Physic, Pork, *Phytolacca*
 Pick-tooth, *Daucus*
 Pigeon Pea, *Cytisus*
 Pig Nut, *Bunium*
 Pig Nut, *Juglans*
 Pile-wort, *Ranunculus*
 Pimento, *Myrtus*
 Pimpernel, *Anagallis*
 Pimpernel, Water, *Veronica*
 Pimpernel, Round-leaved Water,
 Samolus
 Pimpernel, Yellow, of the Woods,
 Lyfimachia
 Pimpillo, *Cactus*
 Pinaster, *Pinus*
 Pine-tree, *Pinus*

Pine,

- Pine, Ground, *Teucrium*
 Pine, Stinking Ground, *Camphoresma*
 Pine, Heath low, *Coris*
 Pine-apple, *Bromelia*
 Pine-apple, Wild, *Bromelia*
 Pine-apple, Wild, *Renealmia*
 Pink, *Dianthus*
 Pink, Indian, *Ipomoea*
 Pink, Indian, *Lonicera*
 Pink, Sea, *Statice*
 Pinpillow, see Pimpillo
 Pipe-tree, *Syringa*
 Pipe-tree, Pudding, *Cassia*
 Piperidge Bush, *Berberis*
 Pippen, *Pyrus*
 Piquets, *Dianthus*
 Pishamin Plum, *Diospyros*
 Piss-a bed, *Leontodon*
 Pistacia Nut, *Pistacia*
 Pistacia-tree, Black Virginian, *Hamamelis*
 Pistacia, Hazel leaved, *Hamamelis*
 Pitch-tree, *Pinus*
 Pitchumon-plum, see Pishamin
 Plaintain-tree, see Plantain
 Plane-tree, *Platanus*
 Plane-tree, False, *Acer*
 Plant, Burning thorny, *Euphorbia*
 Plant, Egg, *Solanum*
 Plant, Humble, *Mimosa*
 Plant, Sensitive, *Mimosa*
 Plant, Bastard sensitive, *Eschynomene*
 Plantain, *Plantago*
 Plantain, Buck's horn, *Plantago*
 Plantain, Hartshorn, *Plantago*
 Plantain, Water, *Alisma*
 Plantain Least Water, *Limosella*
 Plantain, Star headed Water, *Alisma*
 Plantain Shot, *Canna*
 Plantain-tree, *Musa*
 Pliant Mealy tree, *Viburnum*
 Plowman's Spikenard, *Baccharis*
 Plowman's Spikenard, *Conyza*
 Plum-tree, *Prunus*
 Plum, American Black, *Chrysobalanus*
 Plum, Bay, *Psidium*
 Plum, Brazilian, *Spondias*
 Plum, Cocoa, *Chrysobalanus*
 Plum, Hog, *Spondias*
 Plum, Indian Date, *Diospyros*
 Plum, Maiden, *Chrysobalanus*
 Plum, Pishamin, Persimon, or Pitchumon, *Diospyros*
 Poccoon, see Puccoon
 Pockwood, *Guaiacum*
 Poet's Cassia, *Osyris*
 Poet's Rosemary, *Osyris*
 Poison Ash, *Rhus*
 Poison berry, *Cestrum*
 Poison bush, *Euphorbia*
 Poison Oak, *Rhus*
 Poison Tree, *Rhus*
 Poison Wood, *Rhus*
 Poke, Virginian, *Phytolacca*
 Poley Mountain, *Teucrium*
 Poley grass, *Lythrum*
 Polypody, *Polypodium*
 Pomegranate, *Punica*
 Pompon, *Cucurbita*
 Pond weed, *Potamogeton*
 Pond-weed, Triple-headed, *Zannichellia*
 Poor Man's Pepper, *Lepidium*
 Poplar, *Populus*
 Poppy, *Papaver*
 Poppy, Horned, *Chelidonium*
 Poppy, Prickly, *Argemone*
 Poppy, Spatling, *Cucubalus*
 Pork Physic, *Phytolacca*
 Potatoe, *Solanum*
 Potatoe, Indian, *Dioscorea*
 Potatoe, Spanish, *Convolvulus*
 Prick Madam, *Sedum*
 Prick Wood, *Econymus*
 Primrose, *Primula*
 Primrose, Night, *Oenothera*
 Primrose, Peerless, *Narcissus*
 Prim.

Primrose-tree, *Oenothera*
 Princes Feather, *Amaranthus*
 Privet, *Ligustrum*
 Privet, Evergreen, *Rhamnus*
 Privet, Mock, *Phillyrea*
 Puccoon, *Sanguinaria*
 Pudding-grass, *Mentha*
 Pudding Pipe-tree, *Cassia*
 Pumpkin, see *Pompion*
 Pumpkin, see *Pompion*
 Purging Grain, Oily, *Sesamum*
 Purging Nut, *Croton*
 Purging Nut, *Jatropha*
 Purging Thorn, *Rhamnus*
 Purple Apple, *Annona*
 Purslane, *Portulaca*
 Purslane, Horse, *Trianthema*
 Purslane, Sea, *Atriplex*
 Purslane, Water, *Peplis*
 Purslane, Tree Sea, *Atriplex*

Q

Quamoclit, *Ipomœa*
 Queen of the Meadows, *Spirœa*
 Queen's July-flower, *Hesperis*
 Queen's Violet, *Hesperis*
 Quick, *Cratægus*
 Quicken, *Sorbus*
 Quickbeam-tree, *Sorbus*
 Quince-tree, *Pyrus*

R

Radish, *Raphanus*
 Radish, Horse, *Cochlearia*
 Radish, Water, *Sisymbrium*
 Ragged Robin, *Lychnis*
 Ragwort, Common, *Senecio*
 Ragwort, African, *Othonna*
 Ragworts, Sundry, of old Authors, *Senecio*
 Ragworts, Sundry, of old Authors, *Solidago*
 Rampions, Horned, *Phyteuma*
 Rampions, Crested, *Lobelia*

Rampions, Common Esculent, *Campanula*
 Rampious with scabious Heads, *Jasione*
 Ramsons, *Allium*
 Ranunculus, Globe, *Trollius*
 Rape, *Brassica*
 Rape, Broom, *Orobanchæ*
 Rape, Cole, *Brassica*
 Rape of Cistus, *Asarum*
 Raspberry, *Rubus*
 Rattle, *Pedicularis*
 Rattle, Yellow, *Rhinanthus*
 Rattlesnake Root, Senegaw, *Polygala*
 Rattlesnake Root, Dr. Witts, *Prenanthes*
 Rattlesnake Weed, *Eryngium*
 Redbud, *Cercis*
 Red Whorts, Spanish, *Arbutus*
 Reddish, see *Radish*
 Reed, *Arundo*
 Reed, Burr, *Sparganium*
 Reed, Indian flowering, *Canna*
 Reed Mace, *Typha*
 Rennet, Cheese, *Galium*
 Rest Harrow, *Ononis*
 Rhamnus, Bastard, *Hippophaë*
 Rhubarb, *Rheum*
 Rhubarb, Monks, *Rumex*
 Ribwort, *Plantago*
 Rice, *Oryza*
 Ricinus, Bastard, *Croton*
 Roane-tree, *Sorbus*
 Robert, Herb, *Geranium*
 Rocambole, *Allium*
 Rock Germander, *Veronica*
 Rock Rose, *Cistus*
 Rocket, *Brassica*
 Rocket, Bastard, *Reseda*
 Rocket, Corn, *Bunias*
 Rocket, Marsh, *Sisymbrium*
 Rocket, Sea, *Bunias*
 Rocket Square-codded, of Montpellier, *Bunias*
 Rocket,

- Rocket, Water, *Sisymbrium*
 Rocket, Winter, *Sisymbrium*
 Rocket or Dame's, Violet, *Hesperis*
 Rod, Aaron's, *Solidago*
 Rod, Golden, *Solidago*
 Rod-tree, Golden, *Bosca*
 Rod, Shepherd's, *Dipsacus*
 Root, Indian Arrow, *Maranta*
 Root, China, *Smilax*
 Root, False China, *Senecio*
 Root, Fever, *Trioestum*
 Root, Hollow, *Adoxa*
 Root, Rose, *Rhodiola*
 Root, Snake, *Aristolochia*
 Root, Snake, black or wild, of America, *Ara*
 Root, Dr. Witts's Rattlesnake, *Prenanthes*
 Root, Senegaw Rattlesnake, *Polygala*
 Root, Sweet, *Glycyrrhiza*
 Rose, *Rosa*
 Rose, China, *Hibiscus*
 Rose, Christmas, *Helleborus*
 Rose, Corn, *Papaver*
 Rose, Gelder, *Viburnum*
 Rose, Gelderland, *Viburnum*
 Rose, Virginian Gelder, *Spiræa*
 Rose, Martinico, *Hibiscus*
 Rose, Rock, *Cistus*
 Rose of Jericho, *Anastatica*
 Rose Bay, *Nerium*
 Rose Bay Dwarf, *Rhododendrum*
 Rose Bay, Mountain, *Rhododendrum*
 Rose Bay Willowherb, *Epilobium*
 Rose Mallow, *Alcea*
 Rose Root, *Rhodiola*
 Rosemary, *Rosmarinus*
 Rosemary, Poet's, *Osyris*
 Rosemary, Wild, *Ledum*
 Rosemary, Lesser wild, *Andromeda*
 Rue, *Ruta*
 Rue, Dog's, *Scrophularia*
 Rue, Goat's, *Galega*
 Rue, Meadow, *Thalictrum*
 Rue, Wall, *Asplenium*
 Rue, Wild Syrian, *Peganum*
 Rupture-wort, *Herniaria*
 Rupture-wort, Least, *Linum*
 Rush, *Juncus*
 Rush, Flowering, *Butomus*
 Rush, Lesser flowering, *Scheuchzeria*
 Rush, Round, black-headed, Marsh or Bog, *Schoenus*
 Rush, Sweet, *Acorus*
 Rush-grass, *Scirpus*
 Ruyschiana, *Dracoecephalon*
 Rye, *Secale*
 Rye, Wild, *Hordeum*
 Rye-grass, *Hordeum*

S

- Saffron, *Crocus*
 Saffron, Bastard, *Carthamus*
 Saffron, Meadow, *Colchicum*
 Sage, *Salvia*
 Sage, Wild, *Teucrium*
 Sage, Indian Wild, *Lantana*
 Sage, Wood, *Teucrium*
 Sage of Jerusalem, *Pulmonaria*
 Sage of Jerusalem, *Plomis*
 Sage-tree, *Plomis*
 Saint Bartholomew's Herb, *Ilex*
 Saint Bruno's Lily, *Hemerocallis*
 Saint John's Bread, *Ceratonina*
 Saint John's-wort, *Hypericum*
 Saint Peter's-wort, *Ascyrum*
 Saint Peter's-wort, *Hypericum*
 Saint Peter's-wort, Shrubby, *Lonicera*
 Saintfoin, *Hedysarum*
 Sallad, Corn, *Valeriana*
 Sal kali, *Salicornia*
 Sallow, *Salix*
 Salsafy, *Tragopogon*

Salt-

- Salt-wort, *Salicornia*
 Salt-wort, Black, *Glauz*
 Samphire, *Crithmum*
 Samphire, Golden, *Inula*
 Sandbox-tree, *Hura*
 Sanders, see Saunders
 Sanicle, *Sanicula*
 Sanicle, *Saxifraga*
 Sanicle, American Bastard, *Mitella*
 Sanicle, Bear's-ear, *Cortusa*
 Sappadillo-tree, *Sloanea*
 Sapota, *Acbras*
 Sapota Mammee, *Acbras*
 Saracen's Confound, *Solidago*
 Saracen's Confound, The true, *Senecio*
 Saracen's Wound-wort, *Solidago*
 Saracen's Wound wort, The true, *Senecio*
 Sassafras-tree, *Laurus*
 Sassafras, see Salsafy
 Sattin-flower, *Lunaria*
 Sattin, White, *Lunaria*
 Sauce alone, *Erysimum*
 Savin, *Juniperus*
 Savin-tree, Indian, *Bauhinia*
 Saunders, *Santalum*
 Savory, *Satureia*
 Savoy, *Brassica*
 Saw-wort, *Serratula*
 Saxifrage, *Saxifraga*
 Saxifrage, Burnet, *Pimpinella*
 Saxifrage, Golden, *Chrysosplenium*
 Saxifrage, Meadow, *Peucedanum*
 Scabious, *Scabiosa*
 Scabious, Sheep's, *Jasione*
 Scallion, *Allium*
 Scammony, Syrian, *Convolvulus*
 Scammony of Montpelier, *Cynanchum*
 Sciatica Cress, The true, *Lepidium*
 Sciatica Cress, *Iberis*
 Scorching Fennel, *Thapsia*
 Scorpion-grafs, *Scorpiurus*
 Scorpion-grafs, Moufe-ear, *Myosotis*
 Scorpion Senna, *Coronilla*
 Scorpion's Thorn, *Ulex*
 Screw-tree, see Skrew-tree
 Scull-cap, see Skull-cap
 Scurvy-grafs, *Cochlearia*
 Sea Weed, *Fucus*
 Sebesten, *Cordia*
 Sedum Pyramidal, *Saxifraga*
 Seed, Heart, *Cardiispermum*
 Self-heal, *Brunella*
 Self-heal, *Sanicula*
 Senna of the Shops, *Cassia*
 Senna, Bastard, *Cassia*
 Senna, Bastard, *Colutea*
 Senna, Jointed podded Bladder, *Coronilla*
 Senna, Scorpion, *Coronilla*
 Senna, Wild, *Cassia*
 Senegaw Rattlesnake Root, *Polygala*
 Sengreen, *Sempervivum*
 Sensitive Plant, *Mimosa*
 Sensitive Plant, Bastard, *Eschynomene*
 Septfoil, *Tormentilla*
 Sermountain, *Laserpitium*
 Serpent Cucumber, *Trichosanthes*
 Serpent's Tongue, *Ophioglossum*
 Service-tree, *Sortus*
 Service, Maple-leaved, *Cratægus*
 Service, Wild, *Cratægus*
 Setfoil, see Septfoil
 Setwall, see Zedoary
 Setwall, Garden, *Valeriana*
 Setter-wort, *Helleborus*
 Shaddock, *Citrus*
 Shallot, see Eschalot
 Shavegrafs, *Equisetum*
 Sheep Scabious, *Jasione*
 Shepherd's Needle, *Scandix*
 Shepherd's Pouch, *Thlaspi*
 Shepherd's

- Shepherd's Rod, *Dipsacus*
 Shepherd's Staff, *Dipsacus*
 Shot, Indian, *Canna*
 Shot, Plaintain, *Canna*
 Sickie-wort, *Coronilla*
 Side-saddle Flower, *Sarracena*
 Silk Cotton-tree, *Bombax*
 Silk, Virginian, *Periploca*
 Silver Bush, *Anthyllis*
 Silver-tree, *Protea*
 Silver-weed, *Potentilla*
 Simpla Nobla, *Phyllis*
 Simpler's Joy, *Verbena*
 Skirret, *Sium*
 Skull-cap, *Scutellaria*
 Skrew-tree, *Helicteres*
 Sloe-tree, *Prunus*
 Smallage, *Apium*
 Snails, *Medicago*
 Snail Clover, *Medicago*
 Snail Trefoil, *Medicago*
 Snakeweed, *Polygonum*
 Snake Root, *Aristolochia*
 Snake Root, Black or Wild, of
 America, *Aster*
 Snap-tree, *Jussiaea*
 Snap Dragon, *Antirrhinum*
 Snap Dragon of America, *Ruellia*
 Sneezewort, *Achillea*
 Sneezewort, Austrian, *Xeranthemum*
 Snowball-tree, *Viburnum*
 Snowberry-bush, *Lonicera*
 Snowdrop, *Galanthus*
 Snowdrop, Greater, *Leucojum*
 Snowdrop-tree, *Chionanthus*
 Soap Apple, *Sapindus*
 Soap Berry, *Sapindus*
 Soap-wort, *Saponaria*
 Soldanel, *Soldanella*
 Soldanel of the Shops, *Convulvulus*
 Soldier, Water, *Stratiotes*
 Soldier, Fresh Water, *Stratiotes*
 Soldier's Cullions, *Orchis*
 Solomon's Seal, *Convallaria*
 Solomon's Seal, Penylvanian,
 Uvularia
 Sorgo, *Holcus*
 Sorrel, *Rumex*
 Sorrel, Indian Red, *Hibiscus*
 Sorrel, Indian White, *Hibiscus*
 Sorrel, Wood, *Oxalis*
 Sorrel-tree, *Andromeda*
 Sorrowful-tree, *Nyctanthes*
 Sour Gourd, Æthiopian, *Adansonia*
 Sour Soap, *Annona*
 Southernwood, *Artemisia*
 South-sea Tea, *Ilex*
 Sow bread, *Cyclamen*
 Sow Thistle, *Sonchus*
 Sow Thistle, *Prenanthes*
 Sow Thistle, Downy, *Andryala*
 Sow Thistle, Tangier, *Scorzonera*
 Sparrow-grass, see *Asparagus*
 Sparrow-wort, *Passerina*
 Sparrow-wort, Tragus's, *Stellera*
 Spatling Poppy, *Cucubalus*
 Spear-wort, *Ranunculus*
 Speerage, see *Asparagus*
 Speedwell, *Veronica*
 Speedwell, Female, *Antirrhinum*
 Spice Wood, *Laurus*
 Spice, All, *Myrtus*
 Spider-wort, *Antbericum*
 Spider-wort, Great Savoy, *Hemerocallis*
 Spider-wort, Virginian, *Tradescantia*
 Spignel, *Athamanta*
 Spignel, Wild, *Seseli*
 Spike-grass, Winged, *Stipa*
 Spikenard, Indian, or True *
 Spikenard, Bastard French, *Nardus*

* Unknown.

Spike-

- Spikenard, Celtic, *Valeriana*
 Spikenard, False, *Lavandula*
 Spikenard, Plowman's, *Baccharis*
 Spikenard, Plowman's, *Conyza*
 Spikenard, Wild, *Asarum*
 Spinach, *Spinacia*
 Spinach, Strawberry, *Blitum*
 Spindle-tree, *Euonymus*
 Spindle-tree, Climbing, *Celastrus*
 Spindle-tree, Bastard, *Kiggellaria*
 Spindle tree, Bastard, *Celastrus*
 Spiræa Frutex, *Spiræa*
 Spiræa, Atrican, *Diosma*
 Spirting Cucumber, *Momordica*
 Spleen-wort, *Asplenium*
 Spleen-wort, Rough, *Lonicitidis*
 Spleen-wort, Rough, *Polypodium*
 Spoon-wort, *Cocblearia*
 Sponge, *Spongia*
 Sponge-tree, *Mimosia*
 Spurge, *Euphorbia*
 Spurge, Bastard, *Euphorbia*
 Spurge Laurel, *Daphne*
 Spurge Olive, *Daphne*
 Spurrey, *Spergula*
 Squash, *Cucurbita*
 Squill, *Scilla*
 Squill, Lesser White, *Pancratium*
 Staff-tree, *Celastrus*
 Staff, Shepherd's, *Dipsacus*
 Stag's-horn-tree, *Rhus*
 Star of Alexandria, *Ornithogalum*
 Star Apple, *Chrysophyllum*
 Star of Bethlehem, *Ornithogalum*
 Star of Constantinople, *Ornithogalum*
 Star Hyacinth, *Scilla*
 Star of Naples, *Ornithogalum*
 Star Thistle, *Centaurea*
 Star-wort, *Aster*
 Star-wort, Bastard, *Buphthalmum*
 Star-wort, Trailing, of Vera Cruz, *Triadax*
 Star-wort, Yellow, *Inula*
 Star-wort, Yellow, *Buphthalmum*
 Staves Acre, *Delphinium*
 Stich-wort, *Stellaria*
 Stink-horns, *Phallus*
 Stock, *Cheiranthus*
 Stock July-flower, *Cheiranthus*
 Stock, Dwarf Annual, *Hesperis*
 Stock, Virginian, *Hesperis*
 Stone Crop, *Sedum*
 Stone-crop-tree, *Chenopodium*
 Stone Parsley, *Bubon*
 Stone Parsley, Bastard, *Sison*
 Storax-tree, *Styrax*
 Storax, Liquid, *Liquidambar*
 Strawberry, *Fragaria*
 Strawberry, Barren, *Potentilla*
 Strawberry, Barren, *Fragaria*
 Strawberry Blite, *Blitum*
 Strawberry Spinach, *Blitum*
 Strawberry-tree, *Arbutus*
 Succory, *Cichorium*
 Succory, Gum, *Chondrilla*
 Succory, Wart, *Lapsana*
 Sugar Cane, *Saccharum*
 Sulphur-wort, *Peucedanum*
 Sultan-flower, *Centaurea*
 Sumach, *Rhus*
 Sumach, Myrtle-leaved, *Coriaria*
 Sumach, Tanner's or Currier's *Coriaria*
 Sundew, *Drosera*
 Sun-flower, *Helianthus*
 Sun-flower, Bastard, *Helenium*
 Sun-flower, Dwarf, *Rudbeckia*
 Sun-flower, Dwarf, *Tetragonotheca*
 Sun-flower, Little, *Cistus*
 Sun-flower, Tickseeded, *Coreopsis*
 Sun-flower, Willow-leaved, *Helenium*
 Superb Lily, *Gloriosa*
 Swallow-wort, *Asclepias*

Sweet

Sweet Briar, *Rosa*
 Sweet Cicely, *Scandix*
 Sweet Gum, *Liquidambar*
 Sweet John, *Dianthus*
 Sweet Root, *Glycyrrhiza*
 Sweet Sop, *Annona*
 Sweet Sultan, *Centaurea*
 Sweet Weed, *Capraria*
 Sweet William, *Dianthus*
 Sweet William of Barbadoes, *Ipomœa*
 Swine's Cress, *Cocblearia*
 Sycamore, *Ficus*
 Sycamore, False, *Acer*
 Syringa, commonly called, *Philadelphus*

T

Tacamahaca, *Populus*
 Tallow-tree, *Croton*
 Tamarind-tree, *Tamarindus*
 Tamarisk, *Tamarix*
 Tansey, *Tanacetum*
 Tansey, Wild, *Potentilla*
 Tare, *Vicia*
 Taragon, *Artemisia*
 Tarton-raire, *Daphne*
 Tea-tree, *Thea*
 Tea, False, *Ilex*
 Tea, New Jersey, *Ceanothus*
 Tea, Oswego, *Monarda*
 Tea, Paraguay, *Ilex*
 Tea, South-sea, *Ilex*
 Teasel, *Dipsacus*
 Tent-wort, *Asplenium*
 Thistle, *Carduus*
 Thistle, Blessed, *Cnicus*
 Thistle, Carline, *Carlina*
 Thistle, Distaff, *Atractylis*
 Thistle, Distaff, *Carthamus*
 Thistle, Fish, *Carduus*

Thistle, Fuller's, *Dipsacus*
 Thistle, Gentle, *Carduus*
 Thistle, Globe, *Echinops*
 Thistle, Golden, *Scolymus*
 Thistle, Hedge-hog, *Cactus*
 Thistle, Holy, *Cnicus*
 Thistle, Ladies, *Carduus*
 Thistle, Melancholy, *Carduus*
 Thistle, Melon, *Cactus*
 Thistle, Milk, *Carduus*
 Thistle, Soft, *Carduus*
 Thistle, Sow, *Sonchus*
 Thistle, Sow, *Prenanthes*
 Thistle, Downy Sow, *Andryala*
 Thistle, Star, *Centaurea*
 Thistle, Torch, *Cactus*
 Thistle, Woolly, *Onopordon*
 Thorn, Black, *Prunus*
 Thorn, Box, *Lycium*
 Thorn, Christ's, *Rhamnus*
 Thorn, Egyptian, *Mimosa*
 Thorn, Evergreen, *Mespilus*
 Thorn, Goat's, *Astragalus*
 Thorn, Lily, *Catalpa*
 Thorn, Purging, *Rhamnus*
 Thorn, Scorpion's, *Ulex*
 Thorn, Spanish Hedge-hog, *Anthyllis*
 Thorn, White, *Cratægus*
 Thorn, Apple, *Datura*
 Thorny Plant, Burning, *Euphorbia*
 Thorough Wax, *Eupleurum*
 Three Faces under a Hood, *Viola*
 Three-leav'd Grass, *Trifolium*
 Thrift, *Statice*
 Throat-wort, *Campanula*
 Throat-wort, Blue umbelliferous, *Trachelium*
 Thyme, *Thymus*
 Thyme, Dodder of, *Cuscuta*
 Thyme, Mastick, *Satureia*
 Tickseed, *Corispermum*
 Tills,

- Tills, *Ervum*
 Tinker's Weed, Doctor, *Triofcum*
 Toad Flax, *Antirrhinum*
 Tobacco, *Nicotiana*
 Tolu-tree, Balsam of, *Toluisera*
 Tomatoes, *Solanum*
 Tooth-ach-tree, *Zanthoxylum*
 Tooth-pick, *Daucus*
 Tooth-wort, *Dentaria*
 Tooth-wort, *Plumbago*
 Torch Thistle, *Cactus*
 Tormentil, *Tormentilla*
 Touch me not, *Impatiens*
 Touch me not, *Momordica*
 Tower Mustard, *Turritis*
 Tower Mustard, Bastard, *Arabis*
 Tragacanth, Gum, *Astragalus*
 Tragus's Sparrow-wort, *Stellera*
 Traveller's Joy, *Clematis*
 Treacle Mustard, *Cispeola*
 Treacle Mustard, *Thlaspi*
 Tree Moss, *Lichen*
 Trefoil, *Trifolium*
 Trefoil, Bean, *Cytisus*
 Trefoil, Stinking Bean, *Anagyris*
 Trefoil, Bird's-foot, *Lotus*
 Trefoil, Marsh, *Menyanthes*
 Trefoil, Moon, *Medicago*
 Trefoil, Shrub, *Ptelea*
 Trefoil of Montpellier, Shrub, *Lotus*
 Trefoil, Snail, *Medicago*
 Trefoil, Thorny, of Candia, *Fagonia*
 Trefoil Tree, *Cytisus*
 Trefoil, Base-tree, *Cytisus*
 Trinity-herb, *Viola*
 Triple Ladies Traces, *Ophrys*
 True-love, *Paris*
 True-love of Canada, *Trillium*
 Trumpet-flower, *Bignonia*
 Tuberoſe, *Polyanthes*
 Tulip, *Tulipa*
 Tulip, African, *Hemantbus*
 Tulip, Chequer'd, *Fritillaria*
 Tulip-flower, *Bignonia*
 Tulip-tree, *Liriodendrum*
 Tulip-tree, Laurel-leaved, *Magnolia*
 Tan Hoof, *Glechoma*
 Tupelo-tree, *Nyssa*
 Turbith, Arabian or True *
 Turbith Indian, or of the Shops, *Convolvulus*
 Turbith, Garganic, *Thapsia*
 Turk's Cap, *Lilium*
 Turk's Head, *Cactus*
 Turk's Turban, *Ranunculus*
 Turnep, *Brassica*
 Turnep, French, *Brassica*
 Turmeric, *Curcuma*
 Turnſole, *Heliotropium*
 Turpentine-tree, *Pistacia*
 Tutſan, *Hypericum*
 Twopence, Herb, *Lyſimachia*
 Tway Blade, *Ophrys*
 Twy Blade, *Ophrys*

V

- Valerian, *Valeriana*
 Valerian, Greek, *Polemonium*
 Vanilla, or Vaneloe, *Epidendrum*
 Venus's Comb, *Scandix*
 Venus's Looking-glaſs, *Campanula*
 Venus's Navel-wort, *Cynogloſum*
 Vervain, *Verbena*
 Vervain Mallow, *Malva*
 Vetch, *Vicia*
 Vetch, Ax, ſee Hatchet Vetch
 Vetch, Bitter, *Ervum*
 Vetch, Bitter, *Orobus*
 Vetch, Jointed Podded Bitter, *Ervum*

• Unknown.

Vetch,

- Vetch, Chichling, *Lathyrus*
 Vetch, Crimson Grass, *Lathyrus*
 Vetch, Hatchet, *Coronilla*
 Vetch, Clusius's foreign Hatchet, *Biserrula*
 Vetch, Horse-shoe, *Hippocrepis*
 Vetch, Kidney, *Anthyllis*
 Vetch, Liquorice, *Astragalus*
 Vetch, Knobbed-rooted Liquorice, *Glycine*
 Vetch, Milk, *Astragalus*
 Vetch, Bastard Milk, *Phaca*
 Vetch, Venetian, *Orobis*
 Vetch, Medic, *Hedysarum*
 Vetchling, *Hedysarum*
 Vetchling, Medic, *Hedysarum*
 Vetchling, Yellow, *Lathyrus*
 Viburnum, American, *Lantana*
 Vine, *Vitis*
 Vine, Black, *Tamus*
 Vine, Climbing five-leaved, of Canada, *Hedera*
 Vine, Spanish Arbor, *Ipomoea*
 Vine, White, *Bryonia*
 Violet, *Viola*
 Violet, Bulbous, *Galanthus*
 Violet, Calathian, *Gentiana*
 Violet, Dame's, *Hesperis*
 Violet, Dog's Tooth, *Erythronium*
 Violet, Queen's, *Hesperis*
 Violet, Water, *Hottonia*
 Viper's Bugloss, *Echium*
 Viper's Grass, *Scorzonera*
 Virgin's Bower, *Clematis*
 Vitæ, Arbor, *Tbuya*
 Vitæ, Lignum, *Guaiacum*
 Umbrella-tree, *Magnolia*
 Walnut, Jamaica, *Hura*
 Wall-wort, *Sambucus*
 Wanhom, *Kæmpferia*
 Wart Succory, *Lapsana*
 Wart-wort, *Euphorbia*
 Wart-wort, *Heliotropium*
 Wart-wort, *Lapsana*
 Water-leaf, *Hydrophyllum*
 Water Soldier, *Stratiotes*
 Wayfaring-tree, *Viburnum*
 Weld, *Reseda*
 Wheat, *Triticum*
 Wheat, Buck, *Polygonum*
 Wheat, Cow, *Mylampyrum*
 Wheat, French, *Polygonum*
 Wheat, Indian, *Zea*
 Wheat, Turkey, *Zea*
 Whin, *Ulex*
 Whin, Petty, *Ononis*
 White Beam-tree, *Cratægus*
 White Leaf-tree, *Cratægus*
 White Sattin, *Lunaria*
 White Wood, *Bignonia*
 Whitlow Grass, *Draba*
 Whitlow Grass, Rue-leaved, *Saxifraga*
 Whortle Berry, *Vaccinium*
 Whortle Berry, African, *Royena*
 Whorts, Black, *Vaccinium*
 Whorts, Bog, *Vaccinium*
 Whorts, Red, *Vaccinium*
 Whorts, Spanish Red, *Arbutus*
 Wicken-tree, *Sorbus*
 Widow Wail, *Cneorum*
 Willow, *Salix*
 Willow, French, *Epilobium*
 Willow, Spiked, of Theophrastus, *Spiræa*
 Willow, Sweet, *Myrica*
 Willow, Herb, *Epilobium*
 Willow, Herb, *Lytbrum*
 Willow, Herb, *Lyfimachia*
 Willow Herb, Rosebay, *Epilobium*
 Wind

W

Wake Robin, *Arum*
 Wall-flower, *Cheiranthus*
 Walnut, *Juglans*

- | | |
|--|---|
| Wind-flower, <i>Anemone</i> | Worm-seed, <i>Chenopodium</i> |
| Wind Seed, <i>Arctotis</i> | Wormwood, <i>Artemisia</i> |
| Winged Spiked Grass, <i>Stipa</i> | Wormwood, Wild, <i>Parthenium</i> |
| Winter Berry, <i>Prinos</i> | Wortle, Petroseline, <i>Apium</i> |
| Winter Bloom, <i>Azalea</i> | Would, <i>Reseda</i> |
| Winter Cherry, <i>Physalis</i> | Wound-wort of Achilles, <i>Achillea</i> |
| Winter Cherry, <i>Solanum</i> | Wound-wort, Clown's, <i>Stachys</i> |
| Winter Green, <i>Pyrola</i> | Wound-wort, Saracen's, <i>Solidago</i> |
| Winter Green, Ivy-flowering, <i>Kalmia</i> | Wound-wort, Saracen's, the true, <i>Senecio</i> |
| Winter Green, with Chickweed | Wrack, <i>Fucus</i> |
| Flowers, <i>Trientalis</i> | Wrack, Grass, <i>Zostera</i> |
| Winter's Bark, <i>Laurus</i> | |
| Witch Hazel, <i>Hamamelis</i> | Y |
| Witch Hazel, <i>Ulmus</i> | |
| Woad, <i>Isatis</i> | Yams, <i>Dioscorea</i> |
| Woad, Wild, <i>Reseda</i> | Yapon, <i>Ilex</i> |
| Wolf's Bane, <i>Aconitum</i> | Yarrow, <i>Achillea</i> |
| Wolf's Bane, Winter, <i>Helleborus</i> | Yellow Weed, <i>Reseda</i> |
| Wolf's Peach, <i>Solanum</i> | Yerva Mora, <i>Bosca</i> |
| Woodbind, <i>Lonicera</i> | Yew-tree, <i>Taxus</i> |
| Woodbind, Spanish, <i>Ipomoea</i> | |
| Wood of Life, <i>Guaiacum</i> | Z |
| Wood Anemone, <i>Anemone</i> | |
| Wood Sorrel, <i>Oxalis</i> | Zedoary, round, <i>Kampferia</i> |
| Woodroof, <i>Asperula</i> | Zedoary, long, <i>Amomum</i> |
| Woodwaxen, <i>Genista</i> | Zerumbith, <i>Amomum</i> |
| Worm-grass, <i>Spigelia</i> | |

A a

P L A T E I.

P A R T S O F T H E F L O W E R.

Fig. 1. **A** Flower with its Corolla, Pistillum, and Stamina (page 1, 2) *a*, the Petals of the Corolla (p. 5) *b*, the Germen; *c*, the Style; *d*, the Stigma (p. 12) *e*, the Filaments; *f*, the Antheræ (p. 11)

Fig. 2. The Calyx, Pistillum and Stamina, separate from the Corolla (p. 2) *a*, the Perianthium (p. 3) *b*, the Germen; *c*, the Style; *d*, the Stigma (p. 12) *e*, the Filaments; *f*, the Antheræ bursting and discharging the Pollen; *g*, an Anthera before it has burst, (p. 11)

Fig. 3. A Flower whose Corolla is monopetalous; *a*, the Corolla (p. 5) *b*, the Perianthium (p. 3)

Fig. 4. A polypetalous Corolla: *a*, the Ungues; *b*, the Laminæ (p. 8)

Fig. 5. A *Narcissus* issuing from its Spatha: *a*, the Flower; *b*, the Spatha (p. 4)

Fig. 6. An Amentum (p. 4)

Fig. 7. The Fructification of a *Moss*; *a*, the Calyptra (p. 4)

Fig. 8. A *Fungus*: *a*, the Volva (p. 4)

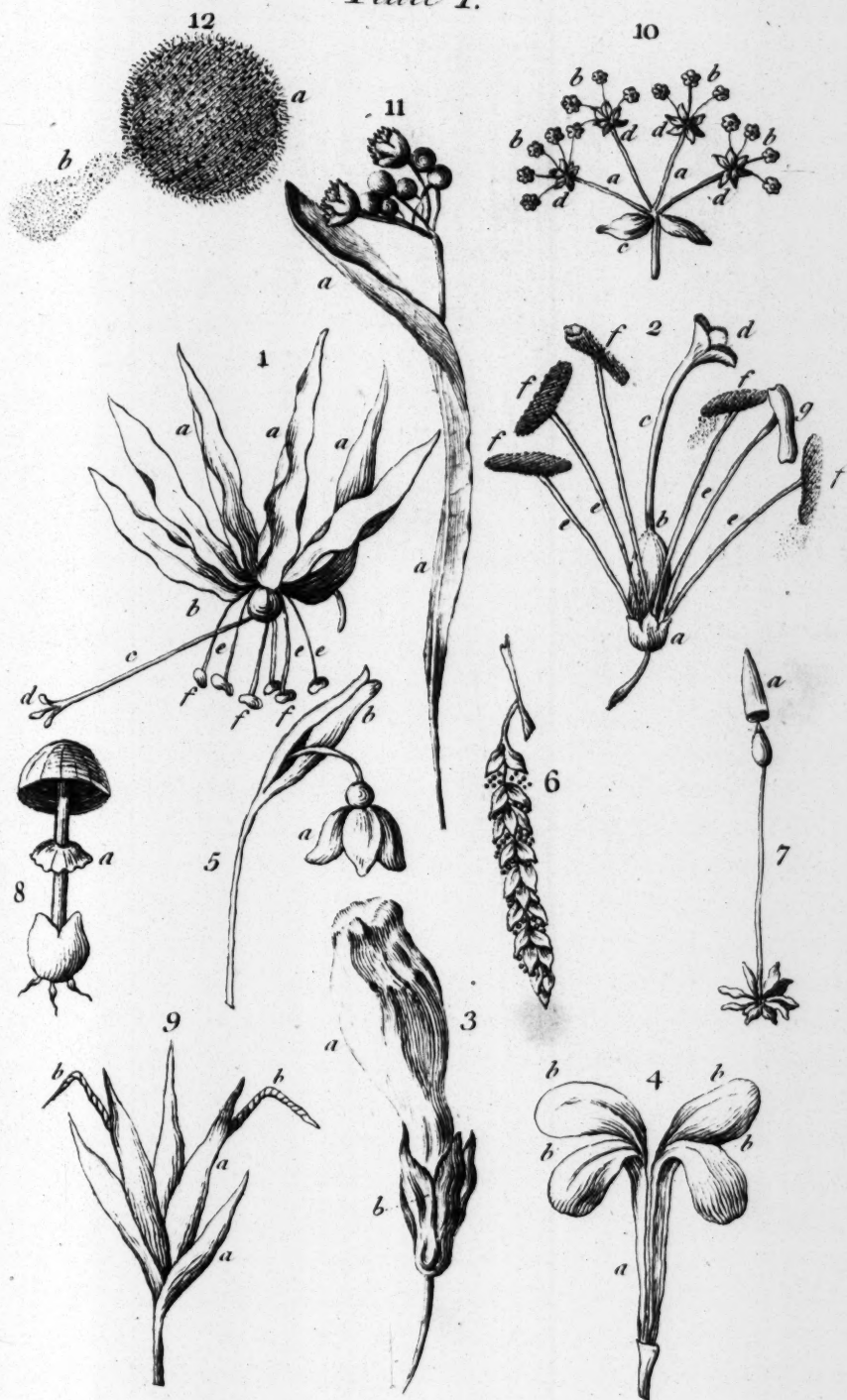
Fig. 9. A *Grass*: *a*, the Gluma; *b*, the Arista, (p. 4)

Fig. 10. A Compound Umbel: *a*, the Universal Umbel; *b*, the Umbellulæ, or partial Umbels (p. 18) *c*, the Universal Involucrum; *d*, the partial Involucra (p. 3)

Fig. 11. A Bractea accompanying the Flowers of the *Tilia*: *a*, the Bractea, (p. 4)

Fig. 12. *a*, the Pollen seen with a Microscope (p. 11) *b*, an elastic Vapour discharged from it (p. 13)

Plate 1.



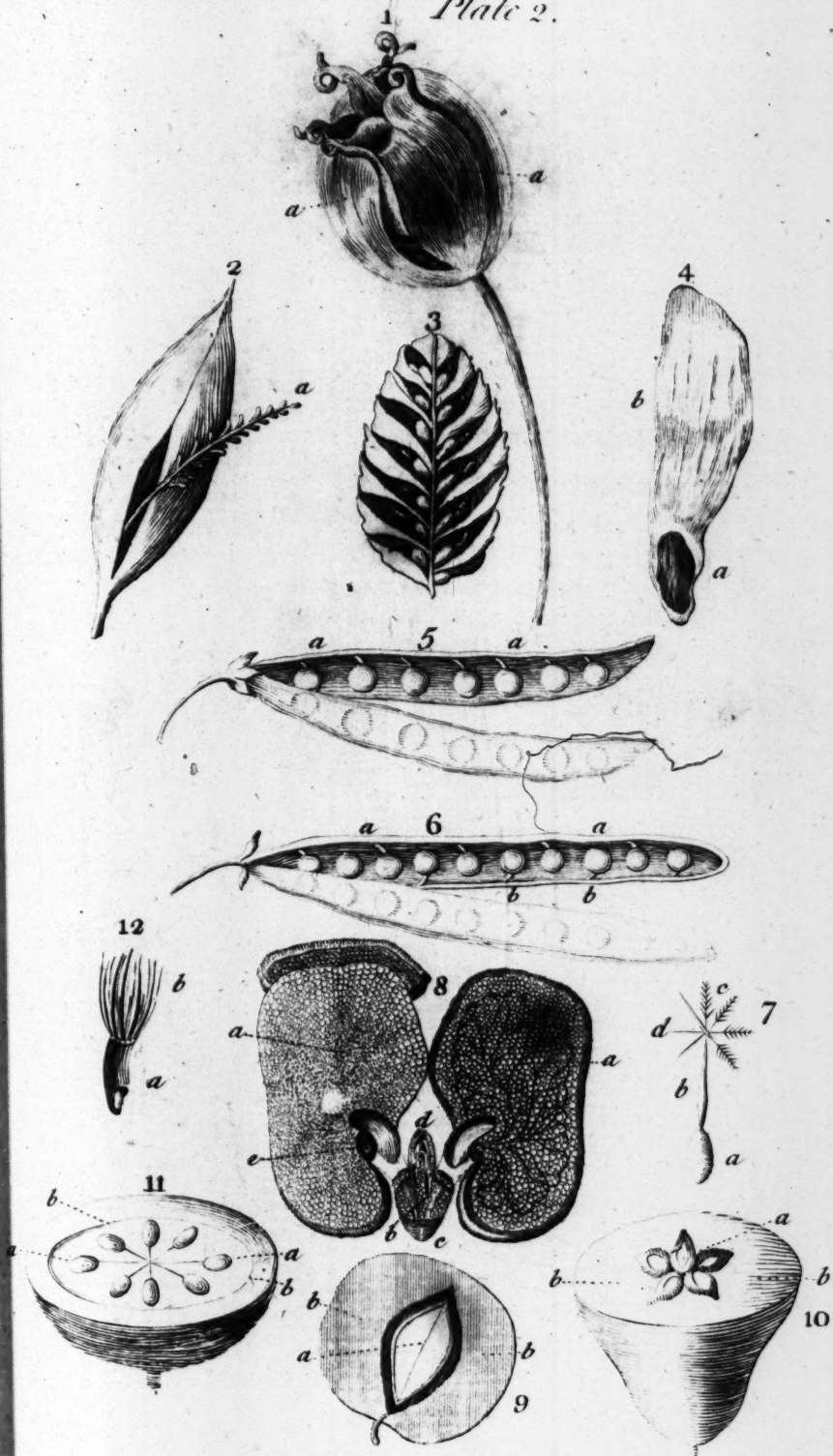
A a z

P L A T E I I.

P A R T S O F T H E F R U I T.

- Fig. 1. **A** Capsule : *a*, the Valvules (p. 14)
- Fig. 2. *a*, A Receptacle of Seeds (p. 17)
- Fig. 3. A Strobilus (p. 15)
- Fig. 4. A winged Seed : *a*, the Seed ; *b*, the Wing (p. 16)
- Fig. 5. A Legumen : *a*, the upper Suture, along which runs the Receptacle of the Seeds (p. 15)
- Fig. 6. A Siliqua : *a*, *b*, the two Sutures to which the Seeds are fastened alternately (p. 14)
- Fig. 7. A Seed crowned with a Pappus : *a*, the Seed ; *b*, the Stipes of the Pappus (p. 16) *c*, a hairy Pappus ; *d*, a feathery Pappus (p. 44)
- Fig. 8. The Seed of a *Bean* split in two ; *a*, the Cotyledons ; *b*, the Corculum ; *c*, the Rostellum ; *d*, the Plumula ; *e*, the Hilum (p. 16)
- Fig. 9. A Drupa : *a*, the Nucleus, or Stone ; *b*, the Pulp, (p. 15)
- Fig. 10. A Pomum : *a*, the Capsule ; *b*, the Pulp (p. 15)
- Fig. 11. A Berry : *a*, the Seeds ; *b*, the Pulp, (p. 15)
- Fig. 12. A Seed crowned with a Calyculus : *a*, the Seed ; *b*, the Calyculus (p. 16, 44)

Plate 2.



III - 3 - 11

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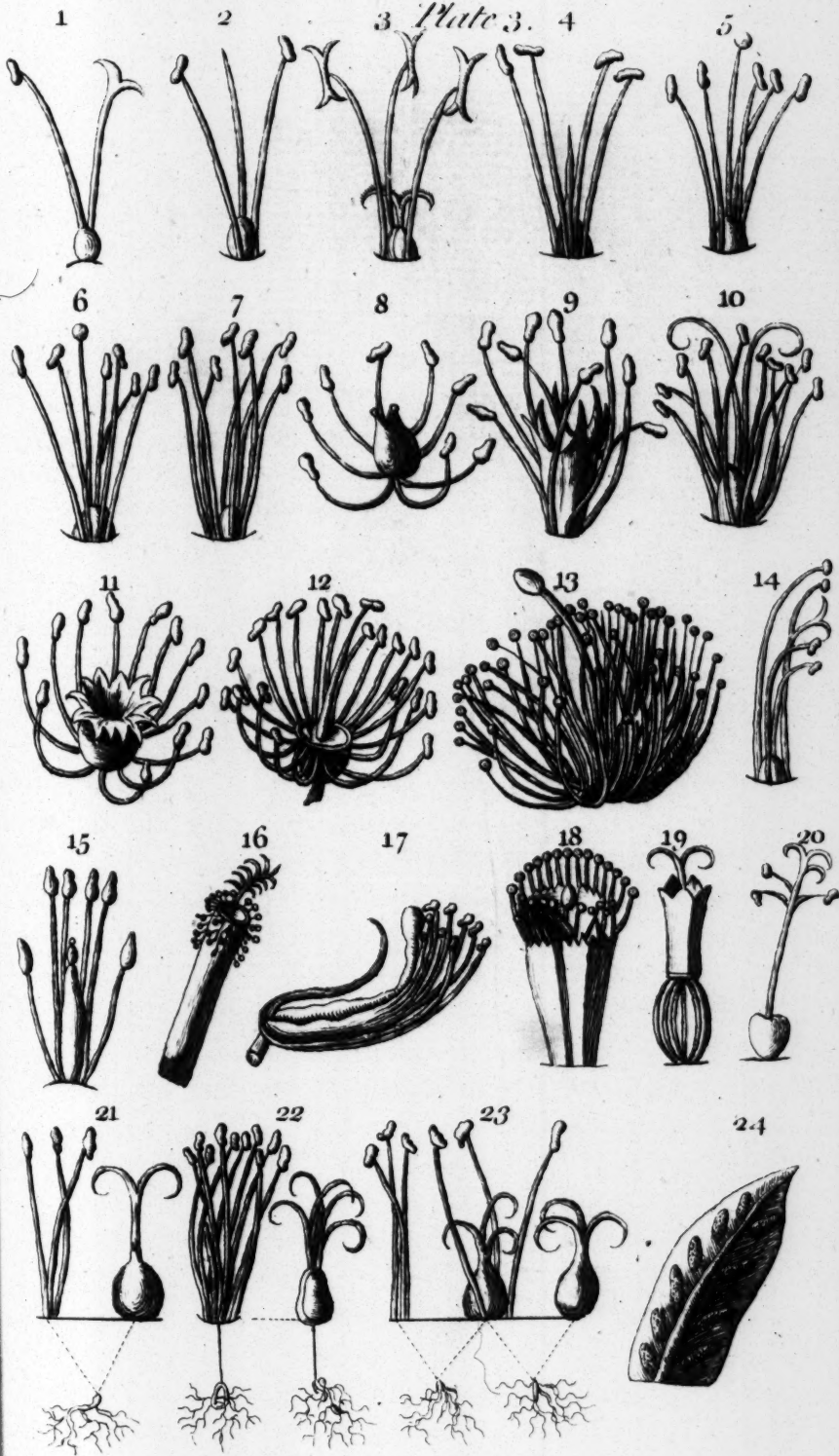
(11111111)

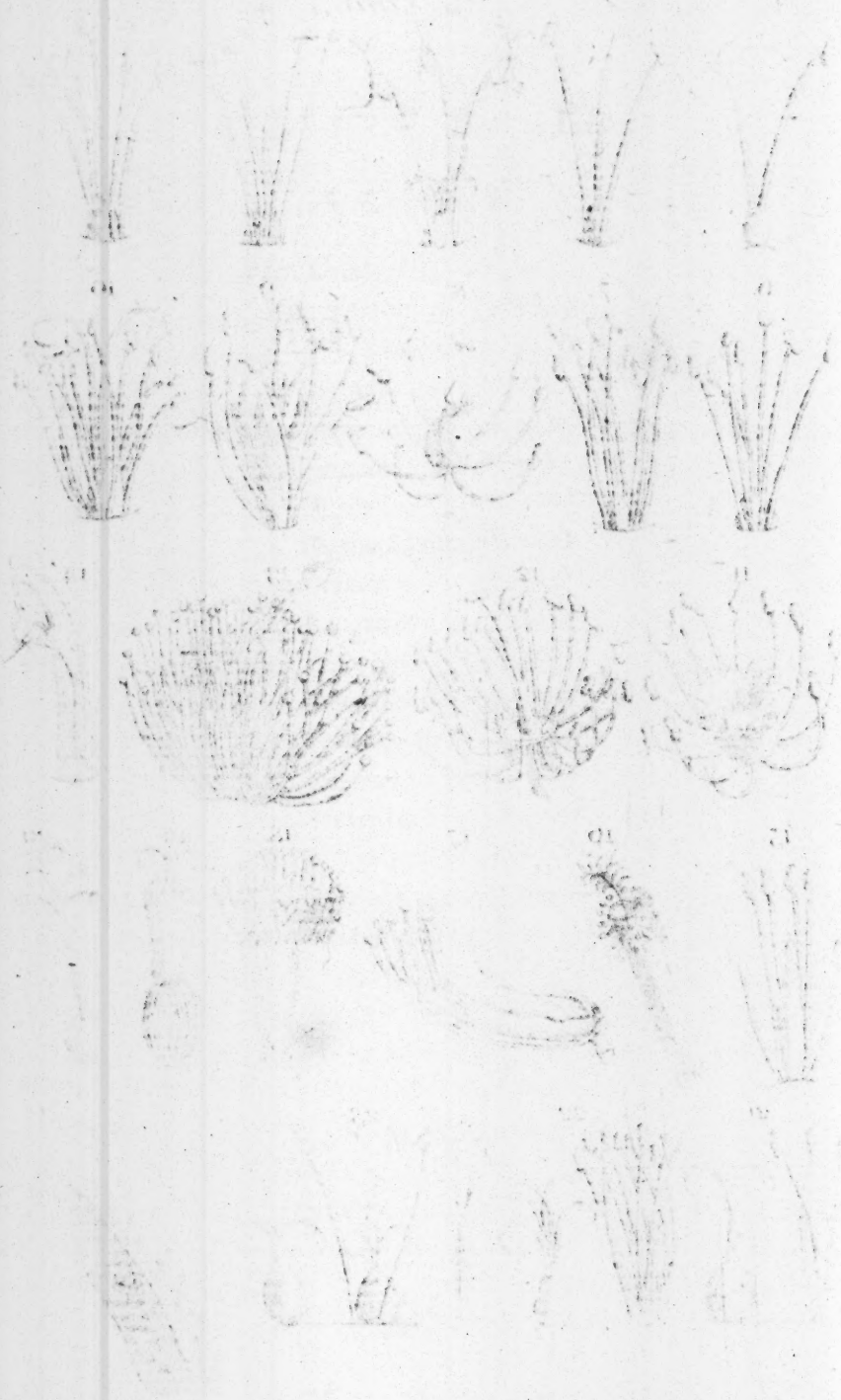
PLATE III.

CLASSES.

FIG. CLASS.

- 1 **M**Onandria (p. 78, 90)
- 2 **M**Diandria (p. 78, 91)
- 3 Triandria (p. 78, 92)
- 4 Tetrandria (p. 78, 94)
- 5 Pentandria (p. 78, 96)
- 6 Hexandria (p. 78, 100)
- 7 Heptandria (p. 78, 102)
- 8 Octandria (p. 78, 103)
- 9 Enneandria (p. 78, 104)
- 10 Decandria (p. 78, 105)
- 11 Dodecandria (p. 79, 107)
- 12 Icosandria (p. 80, 108)
- 13 Polyandria (p. 80, 110)
- 14 Didynamia (p. 80, 112)
- 15 Tetradynamia (p. 81, 117)
- 16 Monadelphia (p. 81, 120)
- 17 Diadelphia (p. 82, 123)
- 18 Polyadelphia (p. 82, 130)
- 19 Syngenesia (p. 82, 131)
- 20 Gynandria (p. 83, 138)
- 21 Monoecia (p. 83, 141)
- 22 Dioecia (p. 83, 144)
- 23 Polygamia (p. 84, 147)
- 24 Cryptogamia (p. 84, 150)





A a 4

P L A T E IV.

R O O T S.

Fig. 1. **A** Squamose Bulb (p. 214)

Fig. 2. A solid Bulb (p. 214)

Fig. 3. Transverse Section of a Tunicate
Bulb (p. 214)

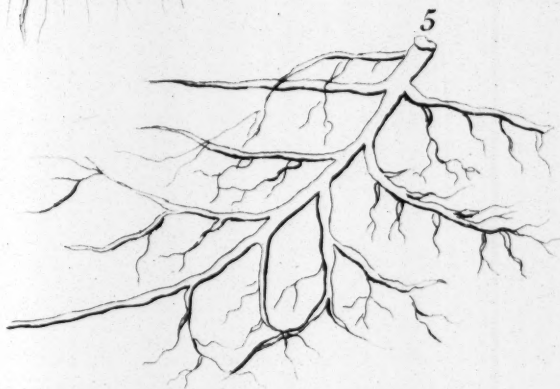
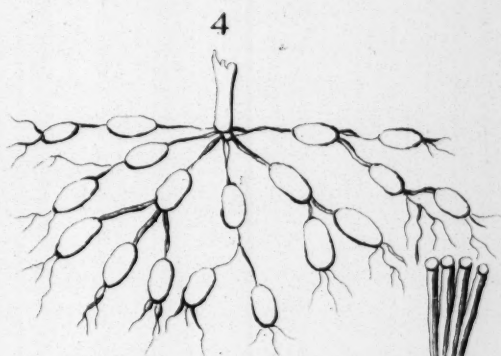
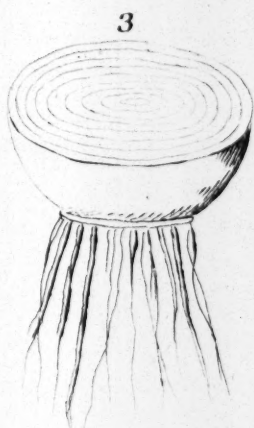
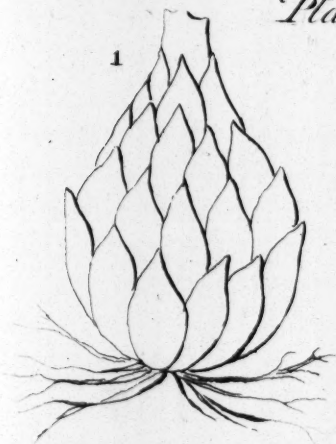
Fig. 4. A pendulous Tuberosc Root of
the Filipendula (p. 214)

Fig. 5. A Ramose Root (p. 178)

Fig. 6. A Fusiform Root (p. 178)

Fig. 7. A Repent Root (p. 178)

Plate 4.



P L A T E V.

T R U N K.

Fig. 1. **A** Squamose Culm (p. 184)

Fig. 2. A Repent Stem (p. 181)

Fig. 3. A Frons (p. 187) see also the
Note at p. 67.

Fig. 4. A Volubile Stem (p. 180)

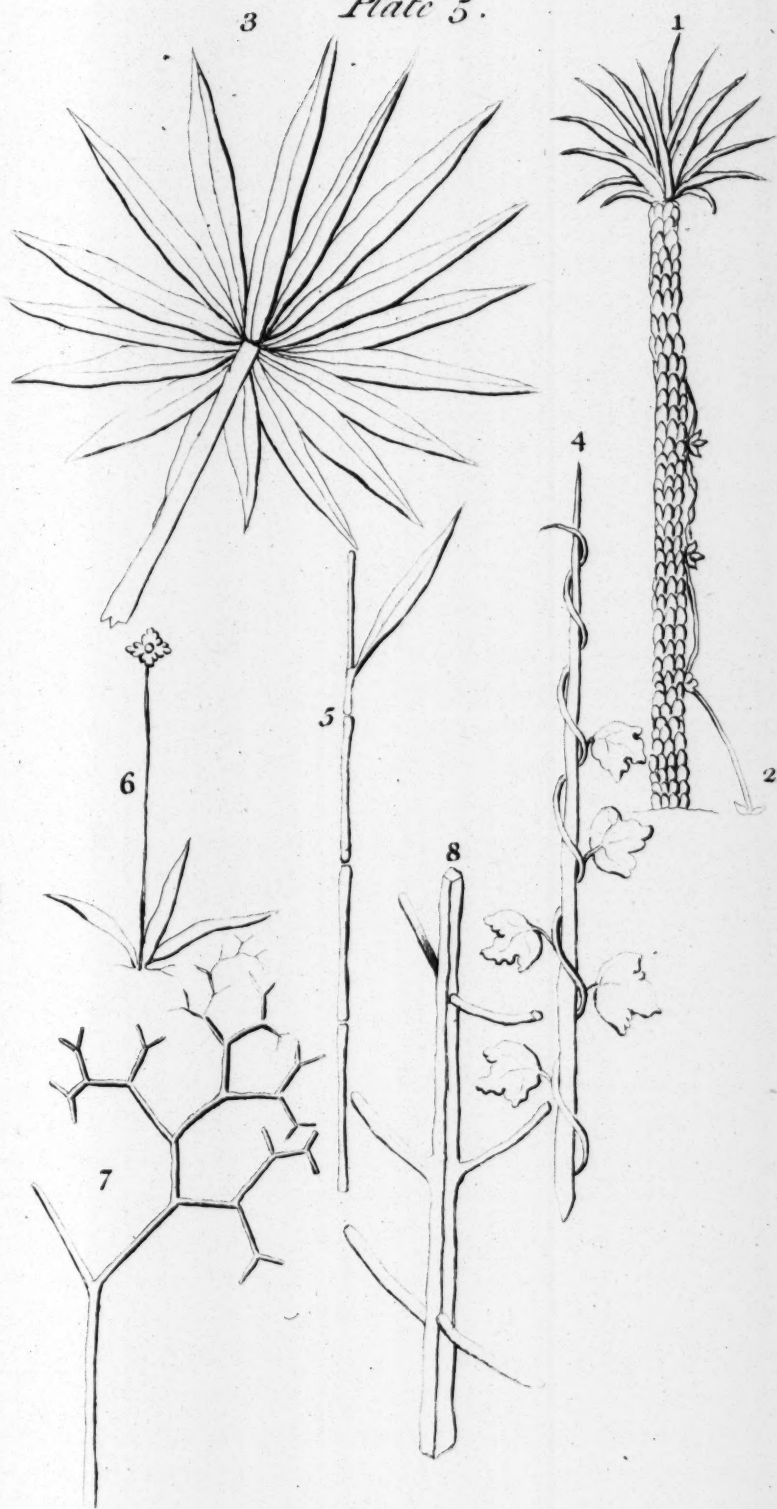
Fig. 5. An Articulate Culm (p. 183)

Fig. 6. A Scapus (p. 184)

Fig. 7. A Dichotomous Stem (p. 183)

Fig. 8. A Brachiate Stem (p. 182)

Plate 5.



P L A T E VI. LEAVES.

S I M P L E L E A V E S.

FIG.

- 1  Orbiculate (p. 188)
- 2  Subrotund (p. 188)
- 3  Ovate (p. 188)
- 4  Oval (p. 188)
- 5  Oblong (p. 189)
- 6  Lanceolate (p. 189)
- 7  Linear (p. 190)
- 8  Subulate (p. 190)
- 9  Reniform (p. 190)
- 10  Cordate (p. 191)
- 11  Lunulate (p. 191)
- 12  Triangular (p. 190)
- 13  Sagittate (p. 191)
- 14  Cordato-sagittate *
- 15  Hastate (p. 191)
- 16  Fissa (p. 191)
- 17  Trilobe (p. 192)
- 18  Præmorse (p. 193)
- 19  Lobate (p. 192)
- 20  Quinquangular (p. 190)
- 21  Erofe (p. 195)
- 22  Palmate (p. 192)
- 23  Pinnatifid (p. 192)
- 24  Laciniate (p. 192)
- 25  Sinuate (p. 192)
- 26  Dentato-finnate †
- 27  Retrosum-finnate ||
- 28  Partite (p. 192)
- 29  Repand (p. 194)
- 30  Dentate (p. 194)

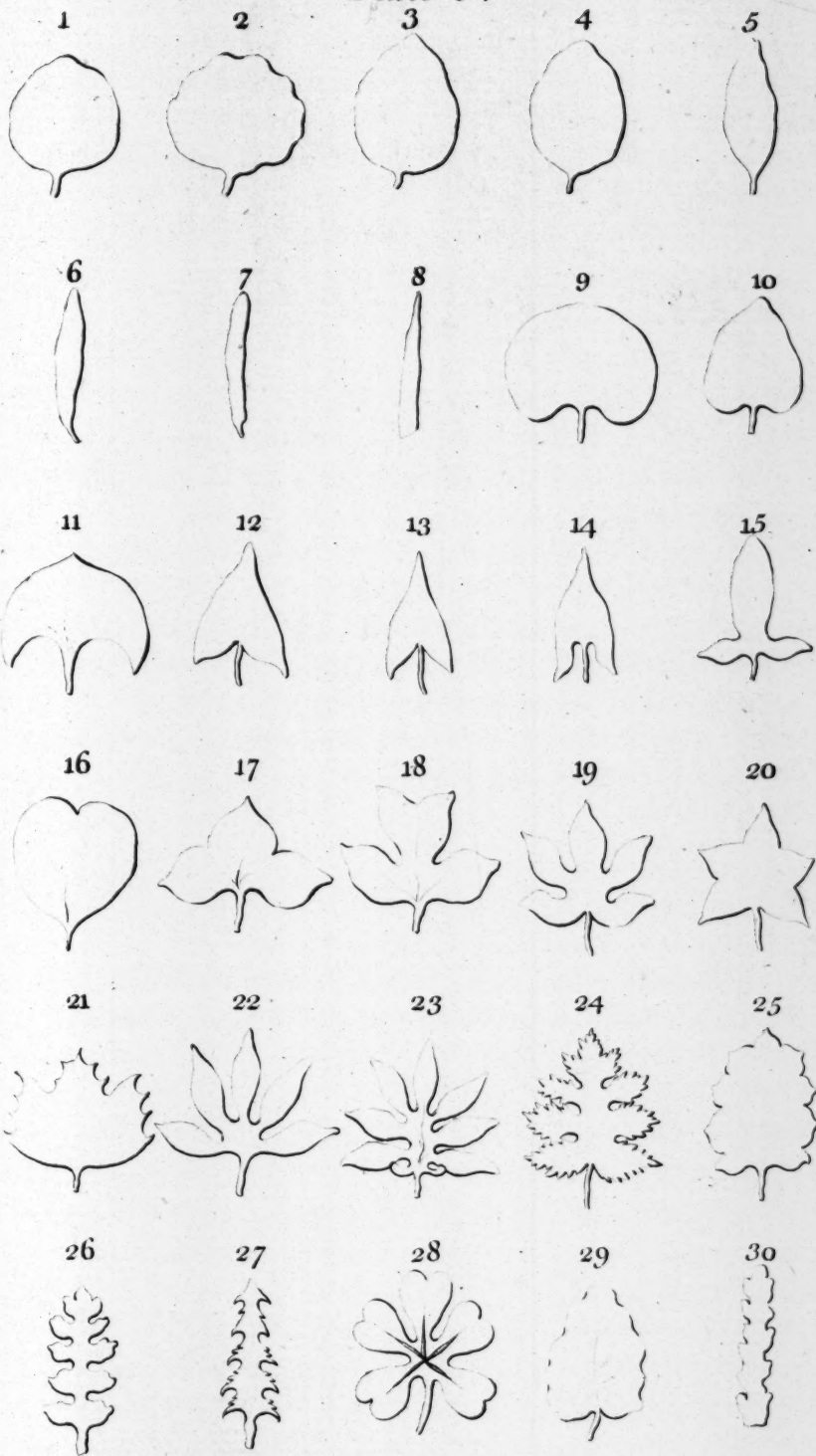
• Partaking of both Heart and Arrow-shape.

† Partaking of the indented and the hollowed.

|| Hollowed backwards.

The Explanation of these Terms were omitted in the Chapter of Simple Leaves.

Plate 6.



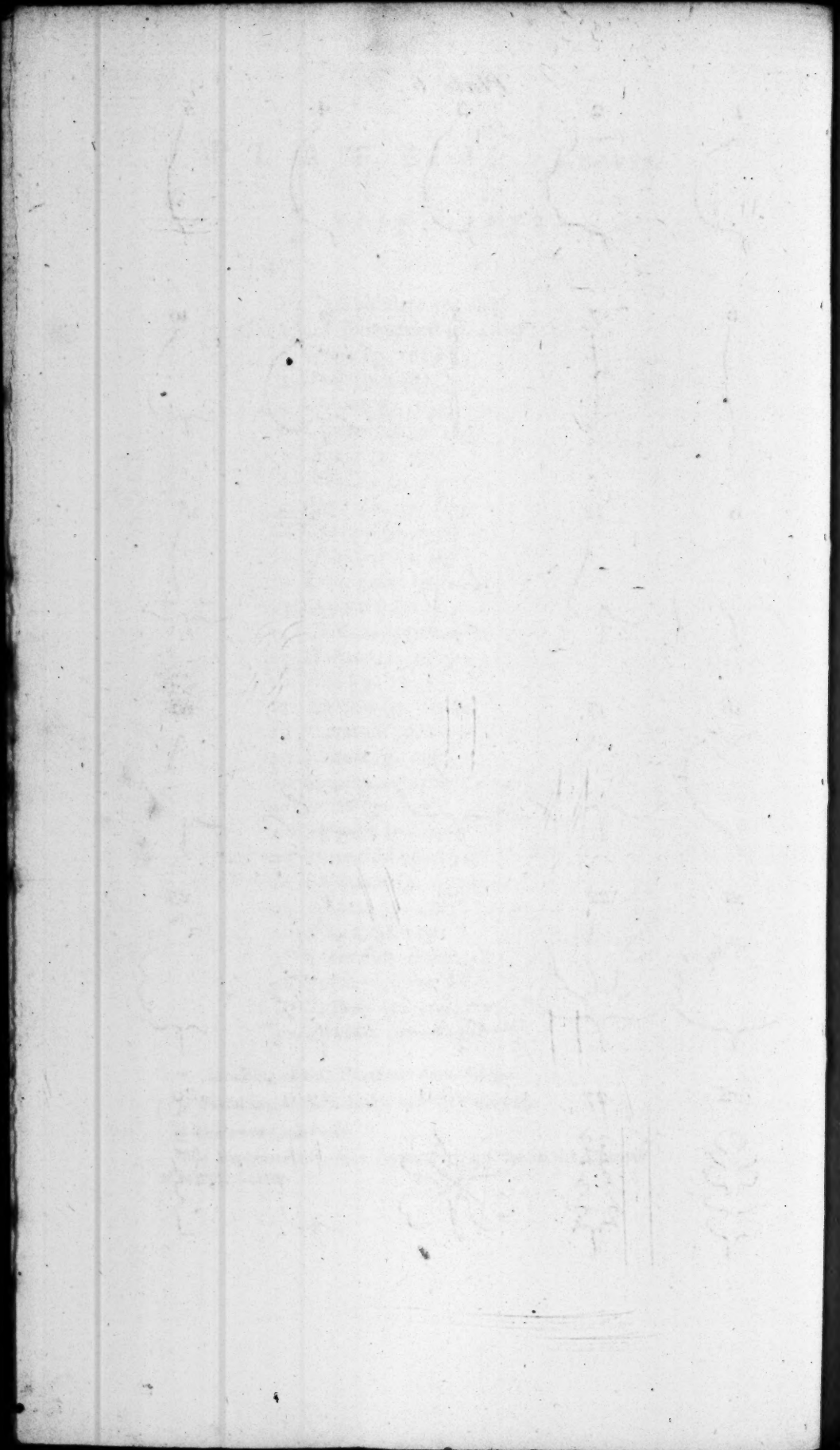


PLATE VII. LEAVES.

LEAVES OF THE PLANTS.

1. Elm (p. 101)
2. Dogwood (p. 102)
3. Dogwood (p. 104)
4. Dogwood (p. 107)
5. Dogwood (p. 104)
6. Dogwood (p. 104)
7. Elm (p. 107)
8. Elm (p. 107)
9. Elm (p. 107)
10. Elm (p. 107)
11. Elm (p. 107)
12. Elm (p. 107)
13. Elm (p. 107)
14. Elm (p. 107)
15. Elm (p. 107)
16. Elm (p. 107)
17. Elm (p. 107)
18. Elm (p. 107)
19. Elm (p. 107)
20. Elm (p. 107)
21. Elm (p. 107)
22. Elm (p. 107)
23. Elm (p. 107)
24. Elm (p. 107)
25. Elm (p. 107)
26. Elm (p. 107)
27. Elm (p. 107)
28. Elm (p. 107)
29. Elm (p. 107)
30. Elm (p. 107)

These leaves are from the collection of the
 Herbarium of the University of Cambridge.

PLATE VII. LEAVES.

SIMPLE LEAVES *Continued.*

FIG.

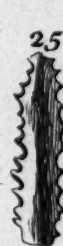
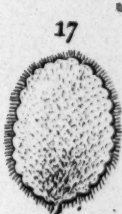
- 1 **S**errate (p. 194)
- 2 **S**uplicato-ferrate (p. 194)
- 3 Duplicato-crenate (p. 194)
- 4 Cartilagineous (p. 195)
- 5 Acutely-crenate (p. 194)
- 6 Obtusely-crenate (p. 194)
- 7 Plicate (p. 197)
- 8 Crenate (p. 194)
- 9 Crisp (p. 197)
- 10 Obtuse (p. 193)
- 11 Acute (p. 193)
- 12 Acuminate (p. 193)
- 13 Obtuse with an Acumen *
- 14 Acutely-emarginate †
- 15 Cuneiform-emarginate ||
- 16 Retuse (p. 193)
- 17 Pilose (p. 196)
- 18 Tomentose (p. 196)
- 19 Hispid (p. 196)
- 20 Ciliate (p. 195)
- 21 Rugose (p. 197)
- 22 Venose (p. 197)
- 23 Nervose (p. 198)
- 24 Papillose (p. 196)
- 25 Linguiiform (p. 199)
- 26 Acinaciform (p. 199)
- 27 Dolabriform (p. 199)
- 28 Deltoid (p. 190)
- 29 Triquetrous (p. 200)
- 30 Canaliculate (p. 199)

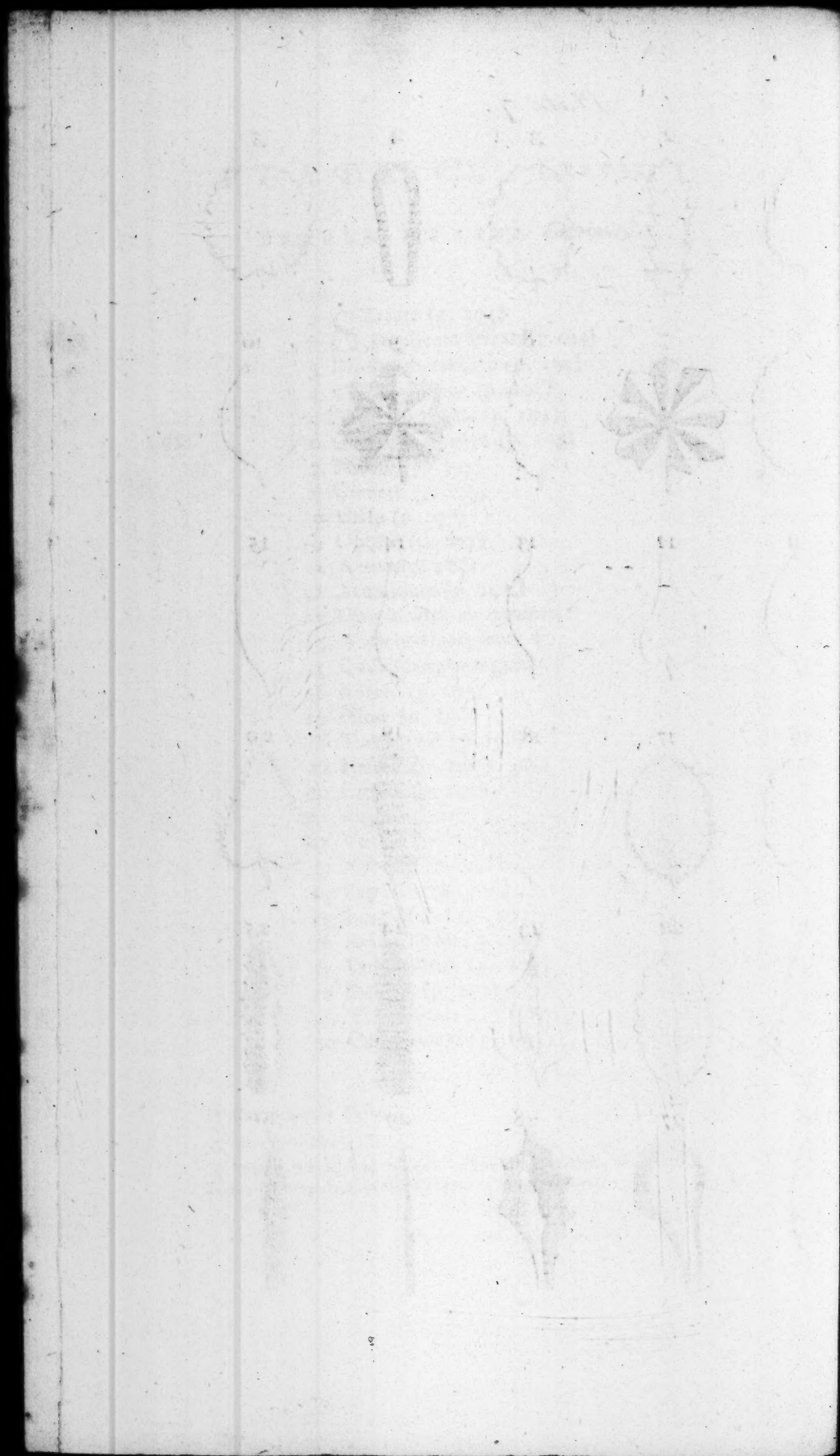
* Blunt with a Point.

† Sharply nicked.

|| Wedge-shaped and nicked. The Explanation of these Terms were omitted in the Chapter of Simple Leaves.

Plate 7.





P. L. A. T. B. VII. 1844.

Stimulus: Avers Comm.

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PLATE VIII. LEAVES.

SIMPLE LEAVES *Continued.*

FIG.

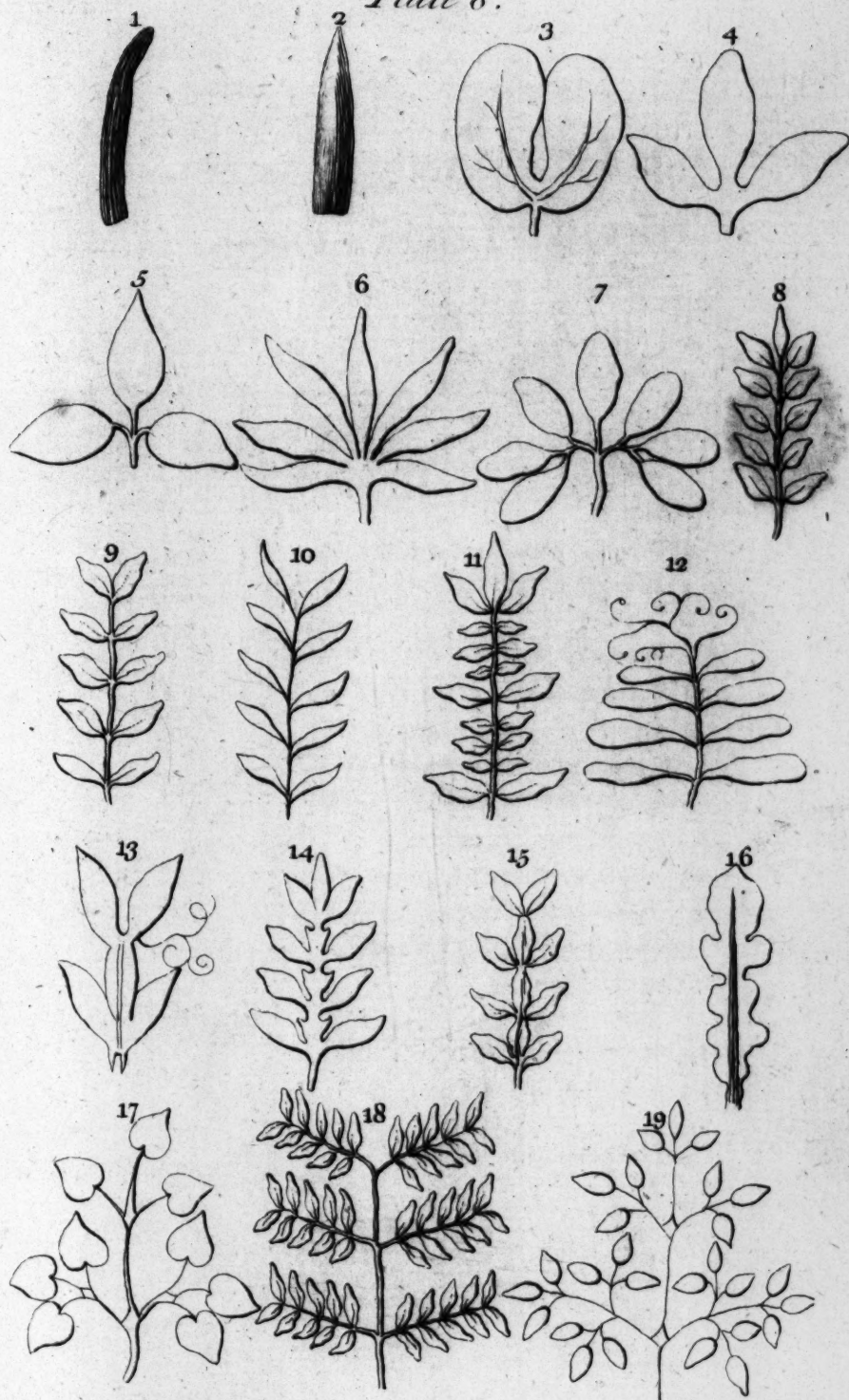
- 1 **S** Ulcate (p. 200)
2 **S** Teretes (p. 198)

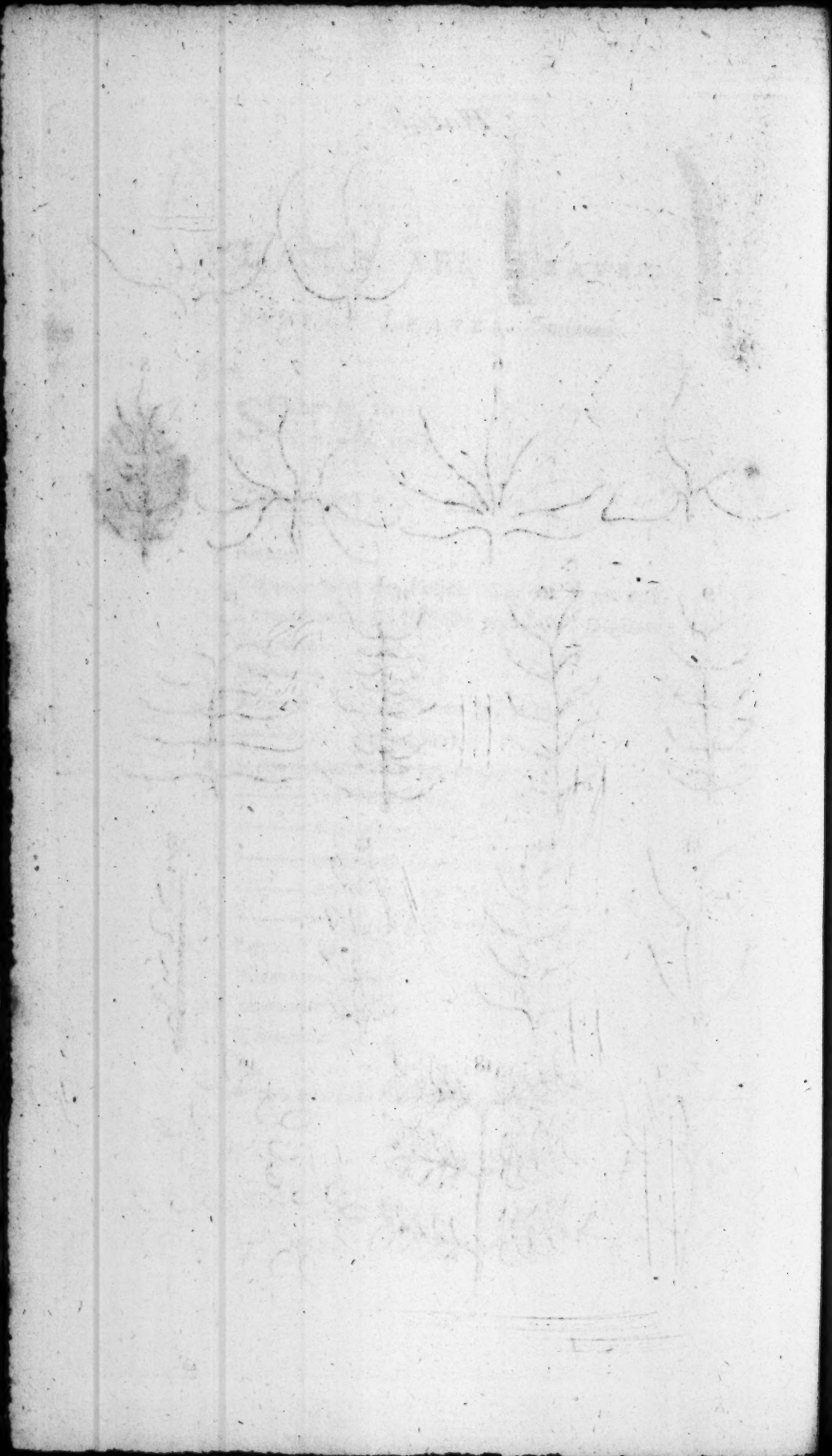
COMPOUND LEAVES.

- 3 Binate
4 Ternate, with the Folioles sessile
5 Ternate, with the Folioles petiolate } (p. 201
6 Digitate } Digitate)
7 Pedate (p. 202)
8 Pinnate with an odd one (p. 201)
9 ——— abrupt (p. 201)
10 ——— alternately (p. 201)
11 ——— interruptedly (p. 201)
12 ——— cirrhose (p. 201)
13 ——— conjugate (p. 202)
14 ——— decurvifely (p. 201)
15 ——— articulately (p. 201)
16 Lyrate* (p. 192)
17 Biternate (p. 202)
18 Bipinnate (p. 202)
19 Triternate (p. 202)

* This belongs to the Simple Leaves.

Plate 8.





Bb

PLATE IX. LEAVES.

COMPOUND LEAVES *Continued.*

- Fig. 1. **T** Ripinnate abrupt (p. 202)
 Fig. 2. **T** ——— with an odd one (p. 201)

DETERMINATE LEAVES.

- Fig. 3. *a*, Inflex (p. 206)
b, Erect (p. 206)
c, Patent (p. 206)
d, Horizontal (p. 206)
e, Reclined (p. 206)
f, Revolute (p. 206)
 Fig. 4. *a*, Seminal (p. 203)
b, Cauline (p. 203)
c, Rameous (p. 203)
d, Floral * (p. 203)
 Fig. 5. *a*, Peltate (p. 205)
b, Petiolate (p. 205)
c, Sessile (p. 205)
d, Decurrent (p. 205)
e, Amplexicaul (p. 205)
f, Perfoliate (p. 205)
g, Connate (p. 205)
h, Vaginant (p. 206)
 Fig. 6. *a*, Articulate † (p. 201)
b, Stellate (p. 204)
c, Quatern (p. 204)
d, Opposite ‡ (p. 204)
e, Alternate (p. 204)
f, Acrosc § (p. 190)
g, Imbricate (p. 204)
h, Fasciculate (p. 204)
 Fig. 7. Parabolic || (p. 189)
 Fig. 8. Spatulate (p. 189)

* This must be distinguished from the Bractææ, or floral Leaf in Plate I.
 Fig. 11.

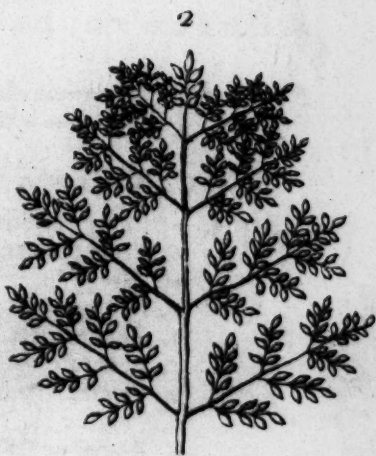
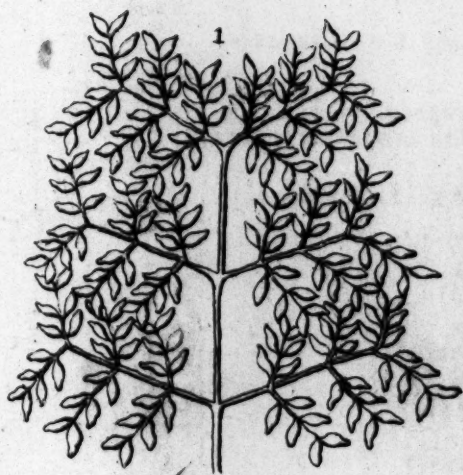
† This is a compound Leaf:

‡ The Definition in the Page cited, confines this Term to Leaves in Pairs that cross each other; but by this Figure, taken from LINNÆUS, it appears to be applicable also to Leaves in Pairs that are not so circumstanced.

§ The Definition of this has been given amongst the simple Leaves though it stands more properly here.

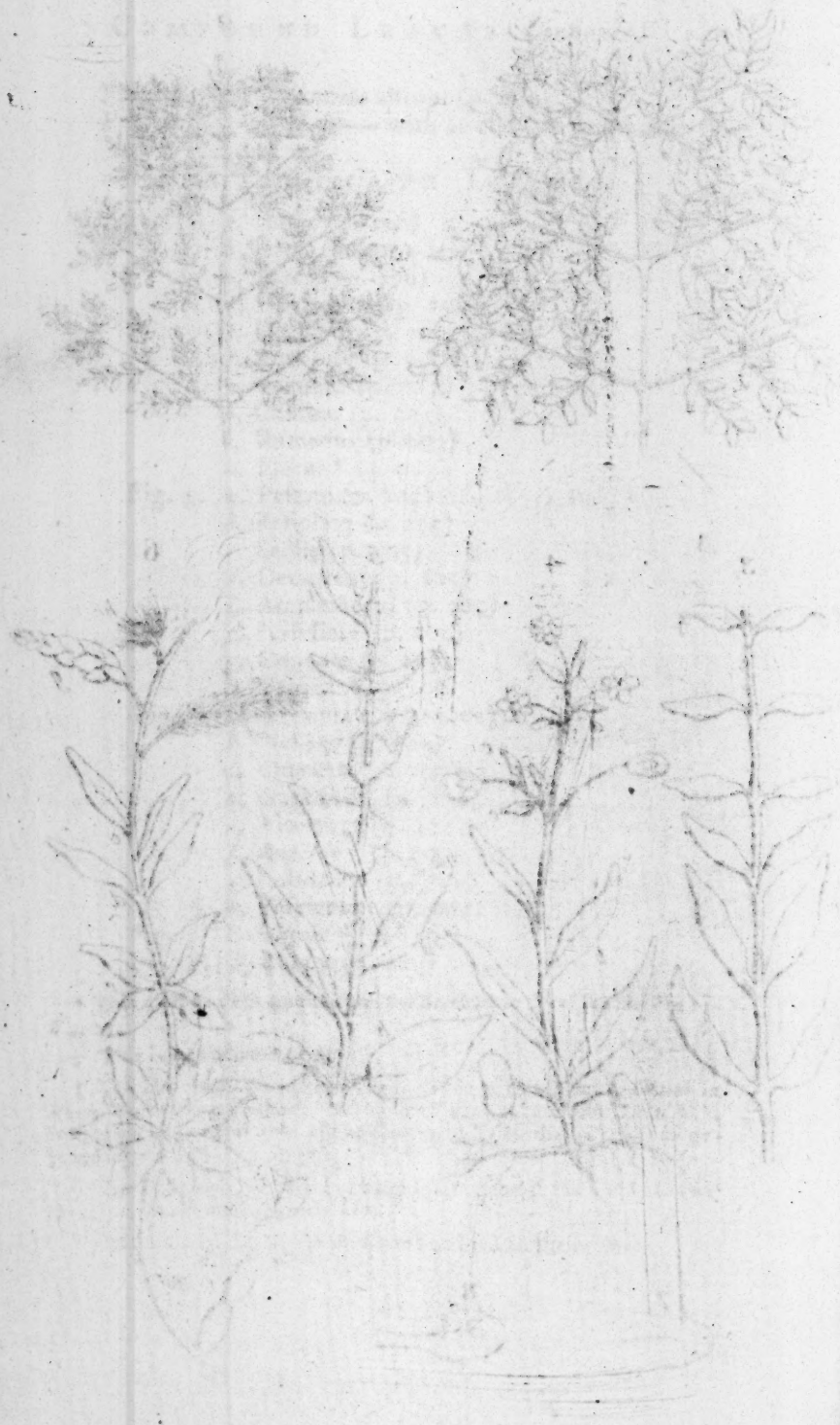
|| This and Fig. 8. are simple Leaves omitted in their Place

Plate 9.



PLANTAE INDICAE

CHINA



B b z

P L A T E X.

F U L C R A.

Fig. 1. *a*, **A** Cirrhus (p. 208)

b, Stipulæ (p. 207, 217)

c, Concave Glandules (p. 208, 230)

Fig. 2. *a*, Pedicellate * Glandules (p. 208, 230)

Fig. 3. *a*, Bractææ differing from the Leaves (p. 208)

b, The Leaves.

Fig. 4. *a*, Simple Spines (p. 208, 229)

b, A Triple Spine.

Fig. 5. *a*, Simple Aculei (p. 208, 229)

b, Triple Aculei, or Forks (p. 229)

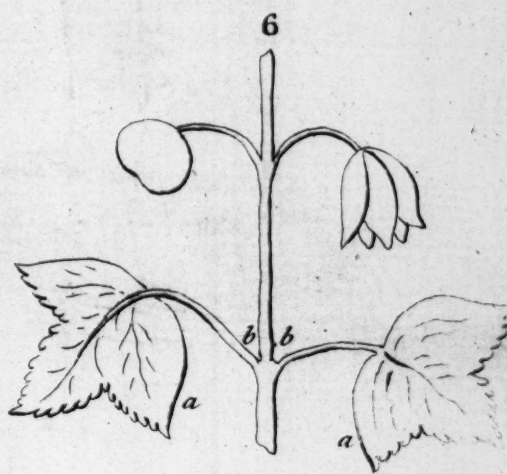
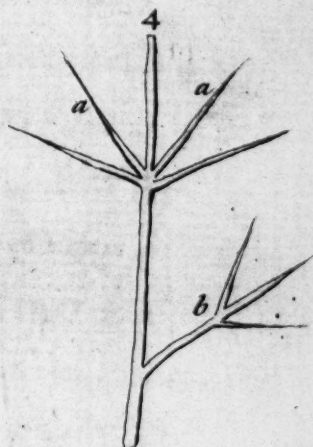
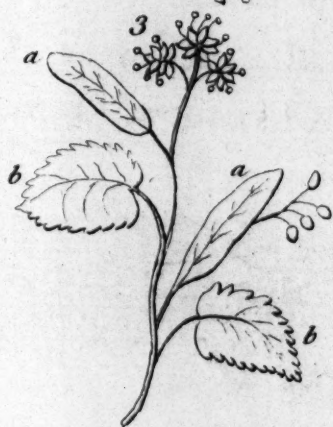
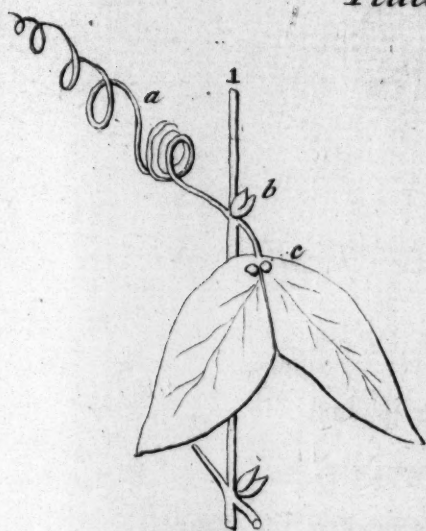
Fig. 6. *a*, Opposite Leaves (p. 204) †

b, The Axillæ (p. 184, 233)

* Such as are born on Pedicells, or little Footstalks.

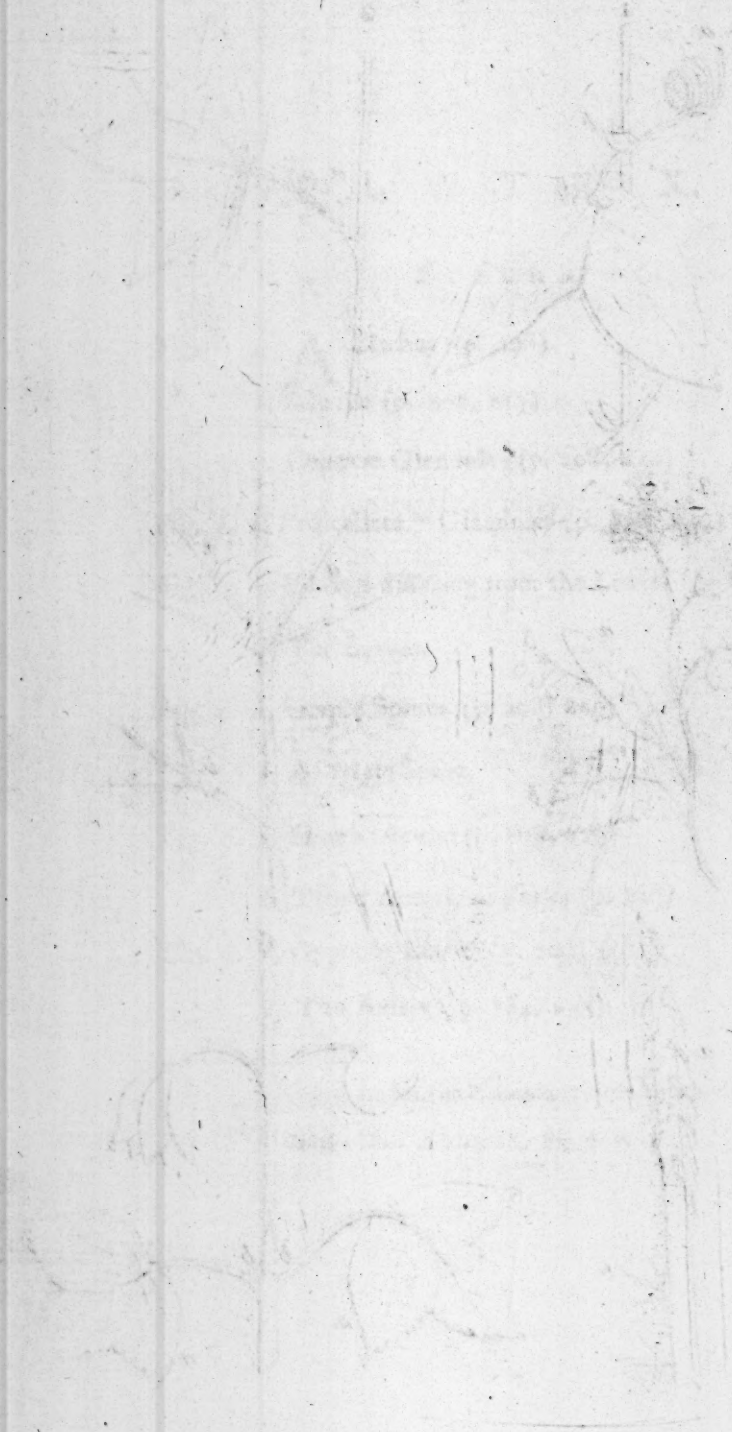
† See the Note on Plate IX. Fig. 6. *d*.

Plate 10.



1800

1800



P L A T E X I.

F O L I A T I O N.

FIG.

- 1 **C**onvolute (p. 222)
- 2 Involute (p. 221)
- 3 Revolute (p. 221)
- 4 Conduplicate (p. 223)
- 5 Equitant (p. 223)
- 6 Imbricate (p. 222)
- 7 Obvolute (p. 222)
- 8 Plicate (p. 223)
- 9 Convoluta * (p. 222)
- 10 Involute opposite
- 11 ——— alternate } (p. 221 involute)
- 12 Revolute opposite (p. 222)
- 13 Equitant ancipit †
- 14 ——— triquetrous ‡ } (p. 223 equitant)

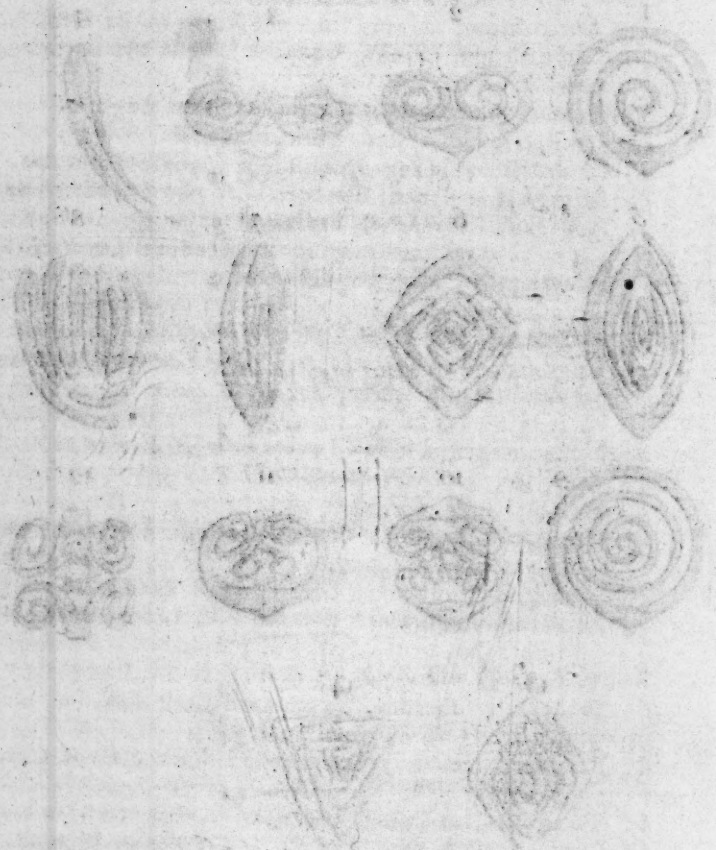
* More than one Leaf convolute. Fig. 1. is a single Convolution.

† Equitant with two prominent Angles. See the Difference in Fig. 5. which has not those Angles.

‡ Equitant three Ways, so as to form a Triangle.

Plate II.





- 43 *Geniculatus*, jointed, divided by Knots or round Swellings.
- 44 *Flexuosus*, waved, bent backwards and forwards from Bud to Bud.
- 45 *Scandens*, climbing, generally by the Support of some other Body.
- 46 *Volubilis*, twining, growing round some other Body in a spiral ascending Direction.
- Dextrorsum*, twining from the Right to the Left.
- Sinistrorsum*, twining from the Left to the Right.

FIGURE.

- 47 *Teres*, round, cylinder-shaped without Angles.
- 48 *Semiteres*, half-round, semicylindrical.
- 49 *Compressus*, flattened, with two opposite Sides flat.
- 50 *Anceps*, two-edged, flattened with two opposite Sides sharp.
- 51 *Angulatus*, angulated, having three or more Angles formed by as many intermediate longitudinal Cavities.
- Acutangulus*, sharp-angled.
- Obtusangulus*, obtusely-angled.
- 52 *Triquetus*, three-sided, having three Sides that are quite flat.
- 53 *Trigonus*, *Tetragonus*, &c. three-cornered, four-cornered, &c. having three, four, or more prominent Angles lengthways
- 54 *Nudus*, naked, without Leaves or other Covering.
- 55 *Aphyllus*, without Leaves.
- 56 *Foliatus*, leafy, furnished with Leaves.
- 57 *Vaginatus*, sheathed, surrounded with a Sheath, formed by the Base of the Leaf.
- 58 *Squamosus*, squamous, covered with Scales.
- 59 *Imbricatus*, imbricate, covered with Leaves or Scales placed like Tiles, or the Scales of Fishes.

SURFACE.

- 60 *Suberosus*, suberous, the outward Bark soft, but elastic like Cork.
- 61 *Rimosus*, rimous, the outward Bark full of Cracks and Fissures
- 62 *Tunicatus*, tunicated, coated with Skins or Membranes.
- 63 *Lævis*, smooth, free from Protuberances or Inequalities.
- 64 *Striatus*, striate, marked with small Lines.
- 65 *Sulcatus*, sulcate, furrowed with deep hollow Lines.
- 66 *Glaber*, slippery, smooth and glossy like Glass.
- 67 *Scaber*, scabrous, covered with rough Prominences.
- 68 *Muricatus*, muricated, covered with sharp Points or Prickles.
- 69 *Tomentosus*, tomentose, covered with Down.
- 70 *Lanatus*, woolly.
- 71 *Villosus*, villous, covered with soft Hair.
- 72 *Pilosus*, pilose, covered with long Hairs that are thinly placed.

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- 73 Hispidus, hispid, covered with stiff Hairs or Bristles.
- 74 Aculeatus, aculeate, armed with Prickles, 378.
- 75 Spinofus, spinous, armed with Thorns, 384
- 76 Urens, stinging, armed with Stings, 391
- 77 Stipulatus, stipulate, having stipula, 291
- 78 Membranatus, membranated, flat like a thin pellucid Leaf.
- 79 Bulbiferus, bearing Bulbs, 655

COMPOSITION.

- 80 Enodis, without Knots or Joints, the Thickness uniform.
- 81 Simpliciffimus, very fimple, with few or no Branches.
- 82 Simplex, fimple, that riles uniform and regular to the Top.
- 83 Integer, intire, undivided.
- 84 Articulatus, jointed.
- 85 Prolifer, proliferous, fending forth Branches only from the Apex
- 86 Dichotomus, branched always by two, forked.
- 87 Brachiatus, brachiate, branching oppofite, the upper Pair crossing the next below.
- 88 Subramofus, fubramous, having few lateral Branches.
- 89 Ramofus, ramous, having many lateral Branches.
- 90 Ramofiffimus, many Branches, fubdivided without Order, in all Directions.
- 91 Virgatus, virgated, with many fender Twigs.
- 92 Paniculatus, paniculated, whole Branches are variously fubdivided.
- 93 Fastigiatus, faftigiate, Branches arifing from a Centre to an equal Height.
- 94 Patens, fpreading 134.
- 95 Divaricatus, divaricate, Branches forming an obtufe Angle from the Trunk, 105

RAMI PARTES CAULIS,

The Branches Part of the Stem.

- 96 Alterni, alternate, when they come out fingle and follow in gradual Order 115
- 97 Distichi, diftichous, in two Rows.
- 98 Sparfi, fparfed, fcattered without Order, 118.
- 99 Conferti, crowded, 119.
- 100 Oppofiti, oppofite, 126
- 101 Verticillati, verticillate, Branches furrounding the Stem, or at the Joints, like the Rays of a Wheel.
- 102 Erecti, erect, upright, perpendicular.
- 103 Coarctati, clofe together, almoft touching towards the Top.
- 104 Divergentes, divergent, Branches growing from the Trunk at Right Angles like Rays from a Centre.
- 105 Divaricati, divaricate, Branches fhooting from the Trunk, fo as to make an obtufe Angle.

- 106 Deflexi, deflex, bending downwards archwise.
- 107 Reflexi, reflex, bending back towards the Trunk.
- 108 Retroflexi, retroflex, bending backward and forward towards the Trunk
- 109 Fulcrati, fulcrate, having Props or Supports.

THE LEAVES.

The Organs by which Plants are put in Motion,

THEIR PLACE.

- 110 Radicale, radical, springing from the Root.
- 111 Caulinum, cauline, springing from the Stem.
- 112 Rameum, rameous, growing on the Branches.
- 113 Axillare, axillary, placed at the Insertion of the Branch.
- 114 Florale, floral, placed near the Flower, and are commonly smaller.

SITUATION.

- 115 Alterna, alternate, when they come out single, and follow in a gradual Order.
- 116 Disticha, distichous, disposed in two opposite Rows, though inserted on all Sides.
- 117 Bifaria, bifarious, inserted only on two opposite Sides of a Branch or middle Rib.
- 118 Sparsa, sparsed, scattered in no certain Order.
- 119 Conferta, confert, crowded together.
- 120 Imbricata, imbricate, lying over one another like Scales of Fishes.
- 121 Fasciculata, fasciculate, growing in Bunches from one Point.
- 122 Gemina, Trina, &c. two, three, or more together from the same Point.
- 123 Confluentia, confluent, growing together or running into one another at the Base.
- 124 Approximata, approximate, mutually approaching each other.
- 125 Remota, remote, placed at some Distance from each other.
- 126 Opposita, opposite, growing opposite, but in such a Manner that each Pair crosses the other above and below.
- 127 Decussata, decussated, where the Pairs cross each other in a regular Manner.
- 128 Verticillata, verticillate, whorled, where three or more Leaves surround the Stem.
- 129 Ternata, Quaterna, &c. three or four together, &c. according to the Number of Leaves surrounding each Joint.

DIRECTION.

- 130 Erectum, erect, upright, perpendicular.
- 131 Strictum, straight, quite perpendicular without Flexure or bending.
- 132 Rigidum, rigid, stiff, not easily bent.

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- 133 Adpressum, adpressed, the Disk of the Leaf pressed towards the Stem.
- 134 Patens, Patent, spreading, making an acute Angle with the Stem.
- 135 Horizontale, horizontal, growing from the Stem at Right Angles.
- 136 Assurgens, assurgent, bending upwards, 33.
- 137 Inflexum, inflex, bending inwards toward the Stem.
- 138 Reclinatum, reclinate, bending downwards archwise, the Apex ascending.
- 139 Recurvatum, recurvate, bent backwards in the Form of an Arch, the convex Side upwards.
- 140 Revolutum, revolute, rolled back in Form of a Scroll.
- 141 Dependens, dependent, hanging with the Point downwards.
- 142 Obliquum, oblique, the Base looking upwards, the Apex to the Horizon.
- 143 Verticale, vertical, Leaves so situated that the Base is perpendicular to the Apex.
- 144 Resupinatum, resupinate, when the lower Disk of the Leaf looks upwards.
- 145 Submersum, submersed, sunk under the Surface of the Water.
- 146 Natans, natant, floating on the Surface of the Water.
- 147 Radicans, radicant, striking Root.

INSERTION.

- 148 Petiolatum, petiolate, having a Petiole or Footstalk, 290
- 149 Peltatum, peltate, having the Footstalk inserted into the Disk of the Leaf.
- 150 Sessile, sessile, sitting immediately on the Stem without a Footstalk.
- 151 Adnatum, adnate, the upper Disk of the Leaf adhering to the Stem by an Attachment of its Base.
- 152 Coadunata, coadunate, several growing together at their Base.
- 153 Decurrens, decurrent, where the Base of a sessile Leaf is elongated and runs down the Stem.
- 154 Amplexicaule, amplexicaul, embracing the Stem with its Base.
- 155 Perfoliatum, perfoliate, where the Base of the Leaf entirely surrounds the Stem, or when the Stalk grows through the Centre of the Leaf.
- 156 Connata, connate, where two opposite Leaves grow together at their Bases.
- 157 Vaginans, vaginant, where the Base of the Leaf forms a tubular Sheath that surrounds the Stem.

FIGURE.

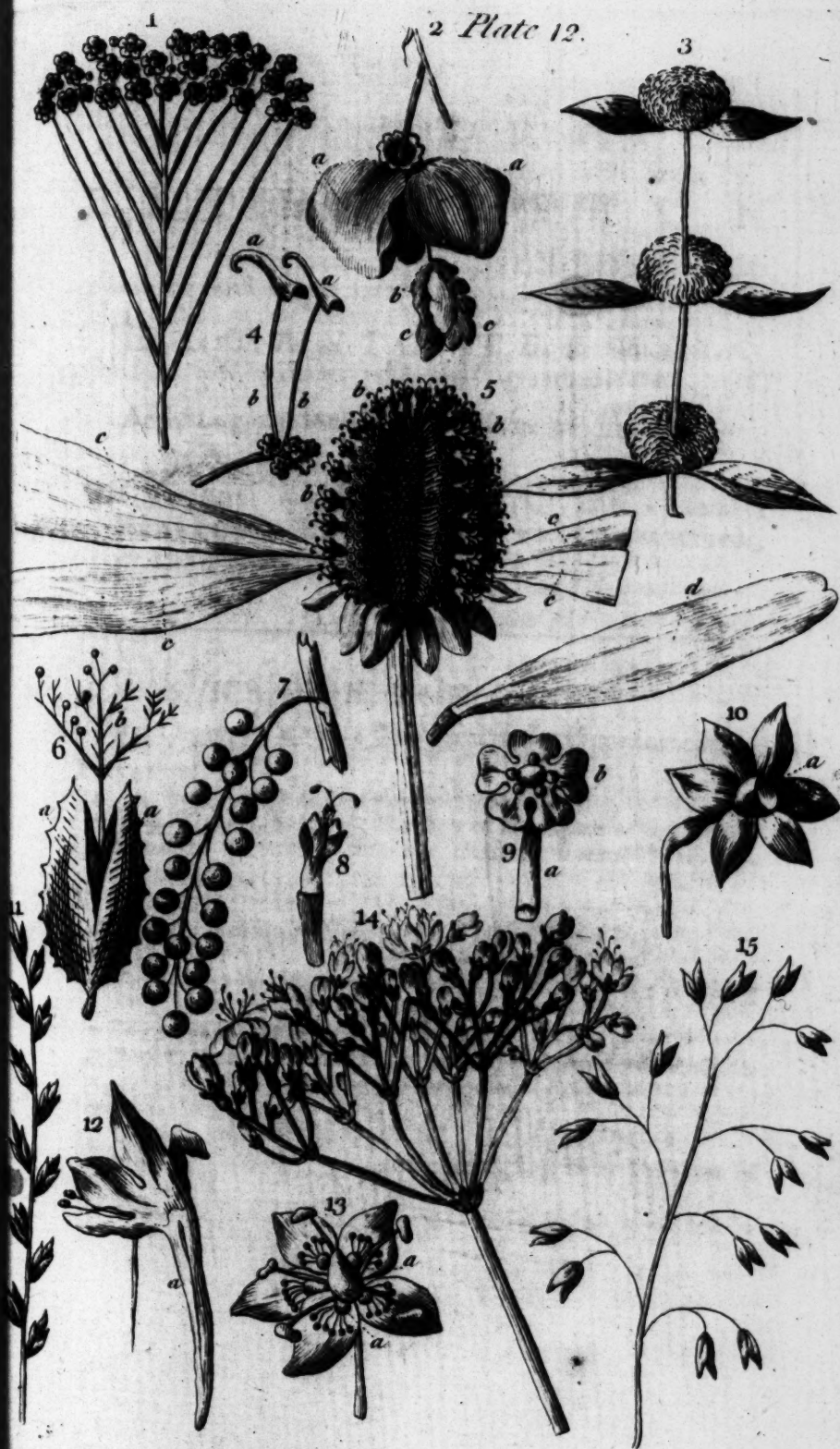
- 158 Subrotundum, subrotund, almost round, nearly circular.

P L A T E XII.

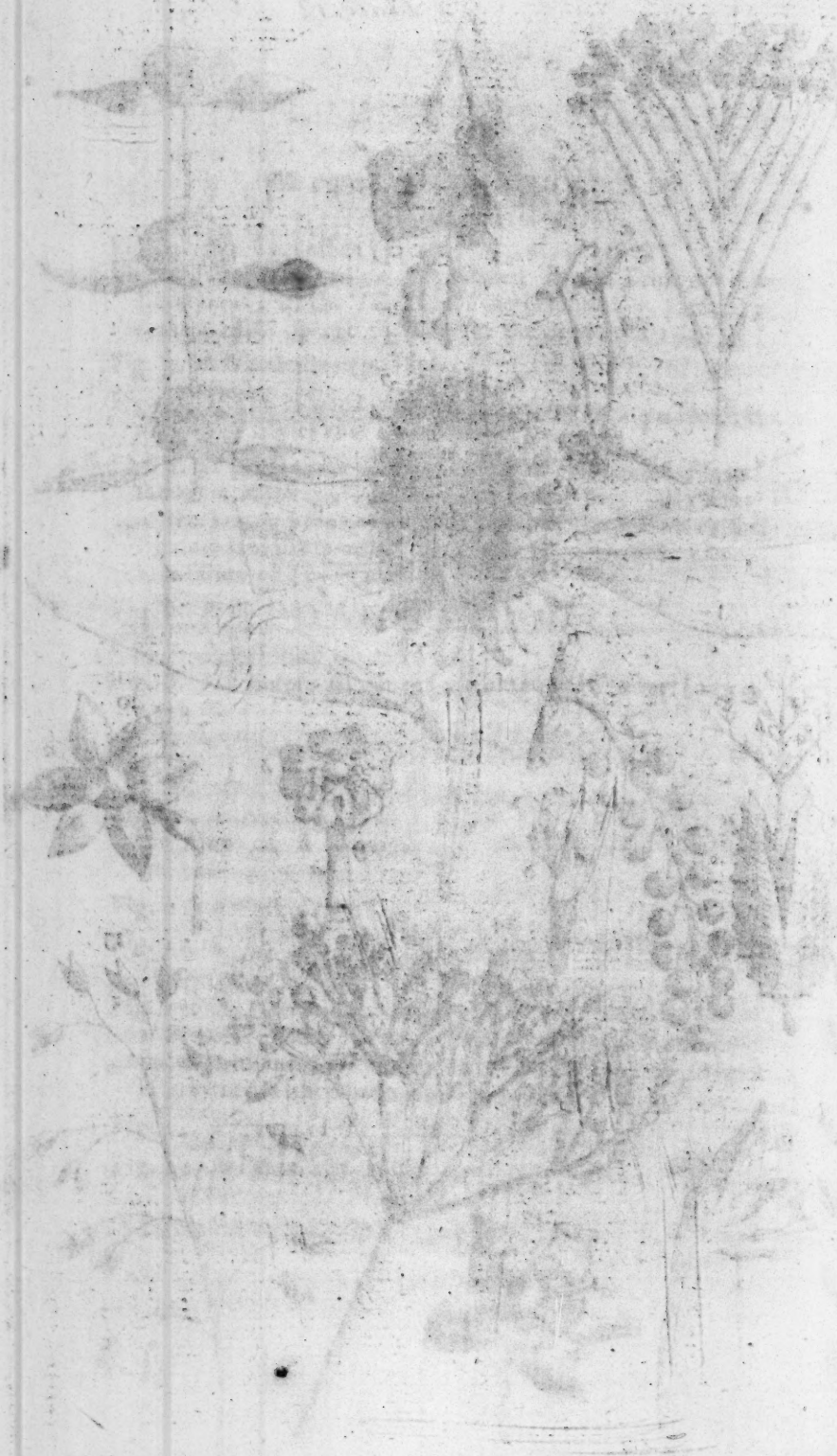
M I S C E L L A N E O U S.

- Fig. 1. **A** Corymbus (p. 186)
- Fig. 2. **A** An Arillus exemplified in the Fruit of the Euonymus: *a*, the Valvules of the Capsule; *b*, a Seed; *c*, the Arillus opened to discover the Seed (p. 61, 51)
- Fig. 3. A Verticillus (p. 186)
- Fig. 4. *a*, The Horned Nectaria in *Aconitum*; *b*, two Peduncles or Styles that support them (p. 8)
- Fig. 5. A paleaceous Receptacle of a compound Flower shewn in *Rudbeckia*; *a*, the Paleæ that part the Florets of the Disk; *b*, the tubulose Florets of the Disk; *c*, the ligulate Corollulæ of the Radius; *d*, a ligulate Corollula fallen off (53, 54, 132)
- Fig. 6. A Spatha; *b*, a Spadix (p. 3, 18)
- Fig. 7. A Racemus (p. 186)
- Fig. 8. A tubulose Floret of a compound Flower (p. 53, 133)
- Fig. 9. A monopetalous hypocrateriform Corolla: *a*, the Tube; *b*, the Limb (p. 7)
- Fig. 10. A Nectarium that crowns the Corolla shewn in the Cup of a *Narcissus*; *a*, the Cup or Nectarium (p. 32)
- Fig. 11. A Spike (p. 185)
- Fig. 12. A calycine Nectarium shewn in the Flower of a *Tropæolum*; *a*, the Nectarium (p. 32)
- Fig. 13. A Nectarium of singular Construction shewn in a Flower of the *Parnassia*; *a*, five heart-shaped Nectaria terminated by Styles or Threads, each of which is crowned with a little Ball (p. 32)
- Fig. 14. A Cyma of the *Laurustinus* (p. 18)
- Fig. 15. A Panicle (p. 186)

2 Plate 12.



2



A N

E X P L A N A T I O N

O F

B O T A N I C T E R M S,

According to the Sexual System of LINNÆUS.

Of various Kinds of ROOTS, the TRUNK,
BRANCHES, LEAVES, and FRUCTIFICATION,
in their natural Order.

R A D I X the R O O T.*

An Organ by which a Plant receives its Nourishment.

DURATION.

- 1 **A** NNUA, annual, that dies in one Year.
- 2 Biennis, biennial, that dies in the Space of two Years.
- 3 Perennis, perennial, that regerminates several Years successively.

FIGURE.

- 4 Fibrosa, fibrous, consisting entirely of Filaments.
- 5 Ramosa, ramous, subdivided into branchy Fibres.
- 6 Fusiformis, spindle-shaped, simple, and gradually lessening downward
- 7 Præmorsa, bitten, or gnawed.
- 8 Repens, creeping horizontally, and putting forth Radicles downward, and shooting upwards
- 9 Articulata, jointed, divided into Joints.
- 10 Dentata, toothed, having Rows of Knobs like Teeth.
- 11 Globosa, round, (158) Roots springing from the Sides of others.
- 12 Tuberosa, tuberous, consisting of fleshy Bodies connected by slender Fibres.

* Vide Page 177.

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- 13 Fascicularis, bunched, fleshy Roots sessile, connected at the Base (150)
- 14 Palmata, handed, fleshy lobate Roots, like Fingers (184)
- 15 Bulbosa, furnished with a Bulb (655)
- 16 Granulata, granulated, round fleshy Roots like Seeds.

TRUNCUS the TRUNK or STEM.

The Organ which supports the Branches, Leaves, and Fructification.

KINDS.

- 17 Caulis, a Stem, which elevates the Fructification and Leaves.
- 18 Culmus, a Straw, properly the Trunk of Grasses.
- 19 Scapus, a Stalk, elevating the Fructification and not the Leaves.

- 20 Stipes, A Trunk that expands itself into a Leaf.

DURATION.

- 21 Herbaceous, herb-like, that perishes every Year, an annual Stem, not woody.
- 22 Suffruticosus, suffruticous, half-shrubby, the Root permanent, and the Branches sometimes withering.
- 23 Fruticosus, shrubby, with perennial Stalks arising from the Root, that are woody.
- 24 Arboreus, tree-like, with a single woody Stem from the same Root.

- 25 Solidus, solid, without internal Pores.

- 26 Inanis, pithy, filled with a spongy Substance.

- 27 Fistulosus, fistulous, hollow like a Pipe.

DIRECTION.

- 28 Erectus, erect, rising nearly to a perpendicular Direction.

- 29 Strictus, straight, perpendicular without Flexure.

- 30 Rigidus, hard, not easily bent.

- 31 Laxus, loose, easily bent.

- 32 Obliquus, awry, in a Direction neither perpendicular nor horizontal.

- 33 Ascendens, rising upwards, with a Curve like an Arch.

- 34 Declinatus, declined, bending downwards archways

- 35 Incurvatus, incurvate, bending inwards.

- 36 Nutans, nodding, the Top or Head bent downwards.

- 37 Diffusus, diffuse, with spreading Branches.

- 38 Procumbens, procumbent, lying on the Ground.

- 39 Stoloniferus, producing Shoots or Runners from the Root.

- 40 Samentosus, thread-like, producing Roots from the Joints.

- 41 Repens, creeping, trailing on the Ground, and here and there producing Roots.

- 42 Radicans, rooting, striking Root laterally and fixing to other Bodies

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- 159 Orbiculatum, orbiculate, of a circular Figure.
- 160 Ovatum, ovate, egg-shaped.
- 161 Ovale, oval, the Shape of an Egg when both ends are equal.
- 162 Oblongum, oblong, twice the Length of its Breadth.
- 163 Parabolicum, parabolic, like the smaller End of an Egg.
- 164 Cuneiforme, cuneiform, wedge-shaped, tapering from the Apex to the Base.
- 165 Spatulatum, spatulate, rounded at the Apex, and narrower and linear at the Base.
- 166 Rotundatum, rotundate, rounded, or with Angles in a Circle.
- 167 Lanceolatum, lanceolate, oblong, and tapering towards both Extremities.
- 168 Ellipticum, elliptical, an Oval whose Ends are equal.
- 169 Lineare, linear, every where of the same Breadth.
- 170 Acerosum, acerose, linear, and permanent, like Chaff, or the Leaves of Pines.

ANGLES.

- 171 Integrum, entire, undivided, without Divisions.
- 172 Triangulare, triangular, &c. three angled, &c.
- 173 Deltoideum, deltoid, a Leaf whose Angles are formed like the Greek Delta.
- 174 Rhombeum, rhombus-shaped, an irregular four-sided Figure resembling the Ace of Diamonds.

SINUSES.

- 175 Trapeziforme, trapeziform, a Figure of four unequal Sides.
- 176 Cordatum, cordate, heart-shaped.
- 177 Reniforme, reniform, kidney-shaped.
- 178 Lunatum, lunate, shaped like a half Moon.
- 179 Sagittatum, sagittate, arrow-shaped.
- 180 Hastatum, hastate, Spear-shaped.
- 181 Runcinatum, runcinate, like the Teeth of a great Saw whose Serratures are bent downwards.
- 182 Panduriforme, panduriform, fiddle-shaped.
- 183 Fissum, slit, divided into linear Partitions.
- 184 Lobatum, lobate, divided into Lobes.
- 185 Bilobum, Trilobum, &c. two and three-lobed, &c. according to the Number of Lobes.
- 186 Partitum, partite, divided almost to the Base; the Number of Divisions are expressed by the Terms *Bipartite*, *Tripartite*, &c.
- 187 Palmatum, palmate, divided like a Hand.
- 188 Lyratum, lyrate, lyre-shaped, with transverse Divisions broadest at the Apex, the lower ones gradually less and more distant.
- 189 Pinnatifidum, pinnatifid, deeply divided into transverse, lateral, oblong Segments.

190 Si-

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- 190 Sinuatum, sinuate, divided into lateral Hollows.
- 191 Laciniatum, laciniate, divided into Segments.
- 192 Squarrosus, squarrose, divided into elevated Segments, not plane or parallel, as in the Calyx of some Syngeneisus Plants.

MARGIN.

- 193 Integerrimum, very entire, without any Incision.
- 194 Crenatum, crenate, where the Margin is notched at Right Angles to the Centre, without inclining to either Extremity.
- 195 Serratum, ferrate, sawed, Notches like the Teeth of a Saw, inclining all the same Way, either towards the Point, or Base.
- 196 Ciliatum, ciliate, where Bristles are arranged in a parallel Order on the Margin of the Leaf, like Eye-lashes.
- 197 Dentatum, dentate, toothed, Points like Teeth protruding from the Margin of the Leaf, at some Distance from each other.
- 198 Spinosum, spinose, where the Margin is armed with sharp Spines.
- 199 Cartilagineum, cartilagineous, where the Margin is hard and tough.
- 200 Repandum, repand, where the Margin is waved.
- 201 Lacerum, lacerate, where the Margin is variously divided, as if torn.
- 202 Erosus, erose, where the Margin is sinuate, as if gnawed with Teeth.
- 203 Membranaceum, membranaceous, where the Margin is thin and pellucid.
- 204 Dædaleum, dedalous, where the Margin has many various Windings and Turnings.

APEX.

- 205 Obtusum, obtuse, where the Point is rounded.
 - 206 Emarginatum, emarginate, where the Apex is notched.
 - 207 Retusum, retuse, terminating in an obtuse Hollow.
 - 208 Præmorsum, premorse, where the Termination appears as if bitten off.
 - 209 Truncatum, truncate, terminating in a Line as if cutoff.
 - 210 Acutum, acute, terminating in a sharp Angle.
 - 211 Acuminatum, acuminate, terminating in a sharp Point.
 - 212 Cuspidatum, cuspidate, terminating in a Point like a Spear.
 - 213 Mucronatum, mucronate, terminating in a small Prickle.
 - 214 Cirrhosum, cirrhose, terminating in a Clasper or Tendril, 292
- Pagina, superior, the upper Disk, or Page, looking upwards.
 Inferior, the lower Disk, looking towards the Earth.

SURFACE.

- 215 Nudum, naked, without Hairs or Excrescences.
- 216 Glabrum, smooth, slippery.
- 217 Nitidum, glossy, smooth and shining.
- 218 Lucidum, lucid, bright, reflecting Light.
- 219 Coloratum, coloured, of a Colour different from Green.
- 220 Nervosum, nervous, with Nerves extended from the Base to the Apex.
- 221 Trinerve, where three Nerves join at the Base and Apex.
- 222 Triplinerve, where three Nerves are each divided into three more above the Base.
- 223 Trinervatum, where three Nerves run into each other at the Base.
- 224 Enerve, without Nerves, opposite to nervous.
- 225 Lineatum, lined, with depressed Nerves or hollow Lines.
- 226 Sulcatum, furrowed, with deep Lines.
- 227 Venosum, veined, with Veins many Ways.
- 228 Rugosum, rugose, wrinkled, shrivelled, rough.
- 229 Bullatum, studded, bladdery, alternately convex and concave
- 230 Lacunosum, where the Disk of the Leaf is depressed into deep Cavities between the Veins that run parallel from the Disk to the Margin.
- 231 Avene, without Veins.
- 232 Punctatum, punctate, with hollow scattered Punctures.
- 233 Papillosum, papillose, covered with fleshy Punctures.
- 234 Papulosum, papulose, covered with vascular Punctures.
- 235 Viscidum, viscid, covered with a viscid Humour.
- 236 Villosum, villous, covered with soft Hairs.
- 237 Tomentosum, downy, covered with downy Hairs.
- 238 Sericeum, silky, covered with soft silky Hairs.
- 239 Lanatum, woolly, covered with woolly Hairs.
- 240 Barbatum, bearded, Hairs growing in Tufts.
- 241 Pilosum, pilous, covered with long Hairs that appear distinctly.
- 242 Scabrum, rough, covered with rigid Punctures raised above the Surface.
- 243 Hispidum, hispid, covered with hard Bristles.
- 244 Aculeatum, prickly, covered with sharp Prickles (378)
- 245 Strigosum, strigous, armed with lance-shaped Prickles (167)

EXPANSION.

- 246 Planum, plane, with a flat equal Surface.
- 247 Canaliculatum, channelled, a deep Channel or Furrow, running lengthwise.
- 248 Concavum, concave, when the Disk is arched from the Margin, and forms a Hollow.

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- 249 *Convexum*, convex, opposite to concave : these two Terms arise from the same Cause, the Margin being two tight for the Expansion of the Disk; therefore if a Leaf is concave on one Side, it is convex on the other.
- 250 *Cucullatum*, hollowed, when the Sides of a Leaf press together at the Base, and expand towards the Apex.
- 251 *Plicatum*, plaited, folded in sharp Flexures from the Disk to the Margin.
- 252 *Undatum*, waved, the Flexures or Folds being obtuse from the Disk to the Margin.
- 253 *Crispum*, curled, where the Margin is plaited, but the Folds do not reach to the middle Rib of the Disk.
- SUBSTANCE.
- 254 *Membranaceum*, skinny, pellucid, without any fleshy Substance.
- 255 *Scariosum*, of a dry parched Substance, that sounds when touched.
- 256 *Gibbum*, gouty, when both Sides of a Leaf is bunched out by a copious Quantity of Pulp.
- 257 *Teres*, cylindrical, or pillar-shaped.
- 258 *Depressum*, more pulpy in the Disk, and flatted towards the Sides.
- 259 *Compressum*, more flatted in the Disk, and pulpy towards the Sides.
- 260 *Carinatum*, carinate, the lower Part of the Disk prominent lengthwise.
- 261 *Compactum*, compact, of a solid Substance.
- 262 *Tubulosum*, tubulous, the Inside hollow without Pith.
- 263 *Pulposum*, pulpos, of a fleshy pulpy Substance.
- 264 *Carnosum*, fleshy, the Inside of a solid Pulp.
- 265 *Triquetrum*, triquetrous, three-cornered lengthwise.
- 266 *Anceps*, two-angled or edged lengthwise.
- 267 *Ligulatum*, Tongue-shaped, linear, fleshy, the lower Side convex.
- 268 *Ensisforme*, sword-shaped, double-edged, gradually lessening from the Base to the Point.
- 269 *Subulatum*, subulate, linear at the Base, and smaller towards the Point.
- 270 *Acinaciforme*, scymitar-shaped, fleshy, and compressed, one Side convex sharp, the other straight and thicker.
- 271 *Dolabriforme*, hatched-shaped, compressed and half round, gibbous outward, the Edge sharp, the lower Part rounded.
- 272 *Deciduum*, deciduous, finished, and falling off in one Summer.
- 273 *Caducum*, cadent, falling off, short Duration, not abiding through the Summer.

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- 274 *Persistens*, persisting, abiding, lasting or remaining more than one Summer.
- 275 *Perenne*, perennial, continuing green many Years.
- 276 *Sempervirens*, evergreen, green at all Times of the Year.
Compositum, when more than one Footstalk supports a Leaf.
- 277 *Articulatum*, articulate, a Leaf having a little Leaf growing out of its Point.
- 278 *Conjugatum*, conjugate, winged, the little Leaves or Wings coming by Pairs.
- 279 *Digitatum*, digitate, a single Foot-stalk connecting the little Leaves at its Top.
- 280 *Binatum*, *Ternatum*, *Quinatum*, &c. terminating by two, three, or five little Leaves or Folioles.
- 281 *Pedatum*, *Pedate*, like the Toes of the Feet, the Foot-stalk dividing Sideways obliquely, and connecting many Folioles.
- 282 *Pinnatum*, pinnate, winged, a simple Foot-stalk connecting many little Leaves sidewise.
- 283 *Bijugum* (thus *Trijuga*, *Quadrijuga*, *Quinquejuga*, *Sejuga*, &c.) winged, but the little Leaves coming by Pairs, and are four, six, eight, ten, twelve, &c.
Cum impari, winged, not terminating in Pairs, but with an odd Foliole.
Abrupte pinnatum, abruptly winged, terminating without a Tendril, or an odd Foliole.
Cirrosus, *cirrhous*, terminating in a Tendril or Clasper, (292)
Foliiis oppositis, (126) the little Leaves growing opposite.
Foliiis alternis, (115) the little Leaves growing alternate.
—— *ruptis*, the little Leaves alternately smaller, broken.
—— *Decursivis*, the Foot-stalks of the little Leaves running down the middle Rib, or *Rachi* (153)

DECOMPOSITION.

- 284 *Bigeminum*, the Foot-stalk forked by two's, (86) connecting many little Leaves.
- 285 *Biternatum*, doubled by threes (280)
- 286 *Bipinnatum*, double-winged (282)

TRIPLE COMPOSITION.

- 287 *Tergeminum*, triple-budded.
- 288 *Triternatum*, three Times three.
- 289 *Tripinnatum*, three Ways winged.

FULCRA, PROPS.

Supports for the better sustaining the different Parts of Plants.

- 290 *Petiolus*, a Foot-stalk that sustains the Leaf.
- 291 *Stipula*, a Scale at the Base of the Footstalk which it supports.

C c 2

292 *Cir.*

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292 Cirrus, Claspers, or Tendrills, growing like Threads in a spiral Form, which takes hold of Plants, or any other Body near it.

293 Pubes, a downy Hair in all Plants.

294 Arma, armed with Points, to keep off Animals from hurting them.

295 Bractea, floral Leaves, the Face and Texture different from other Leaves.

296 Pedunculus, the Foot-stalk or Prop that sustains the Fructification.

PETIOLUS, FOOT-STALK of the LEAF.

FIGURE.

297 Linearis, (169) linear, every where the same Breadth.

298 Alatus, winged, spread out at the Sides.

299 Clavatus, clubbed, thickened towards the Point.

300 Membranaceus, flat, thin, and generally pellucid.

301 Teres, (257) rounded like a Cylinder, pillar-shaped.

302 Semiteres (48) half-rounded, like a split Column.

303 Triqueter (52) three-sided.

MAGNITUDE.

304 Brevissimus, very short, when the Length of the Footstalk is not equal to the Length of the Leaf.

305 Brevis, short, not quite so long as the Leaf.

306 Mediocris, of the Length of the Leaf.

307 Longus, longer than the Leaf.

308 Longissimus, something longer than the Leaf.

INSERTION.

309 Insertus, inserted, joined.

310 Adnatus, (151) adhering to.

311 Decurrens (153) running down the Branch.

312 Amplexicaulis, (154) embracing the Stalk with its Base.

313 Appendiculatus, a leafy Appendage adhering to the Base of a Leaf.

DIRECTION.

314 Erectus (130) upright.

315 Patens (134) spreading.

316 Assurgens (136) bending upwards in a Kind of Arch.

317 Recurvatus (139) bent backwards.

SURFACE.

318 Glaber (216) smooth.

319 Aculeatus (244) prickly.

320 Nudus (215) naked.

321 Articulatus (84) jointed.

322 Spinescens, hard, and sharp.

STIPULÆ, APPENDAGES to the LEAF.

323 Geminae, two and two, by Pairs.

- 324 Solitariae, single, scattered.
- 325 Laterales, inserted in the Sides.
- 326 Extrafoliaceae, on the Outside, below the Base of the Petiole.
- 327 Intrafoliaceae, on the Inside above the Base of the Petiole.
- 328 Oppositifoliae, opposite, placed on the Sides at the Base of the Leaf.
- 329 Caducae, (273) falling off, withering before the Leaf.
- 330 Deciduae, (272) falling annually.
- 331 Persistentes, abiding after the Leaf falls off.
- 332 Spinifcentes, (322) hard and sharp, like a Spine or Prickle.
- 333 Sessiles, (150) squat, having no Footstalk.
- 334 Adnatae, (151) adhering to the Branch by an Attachment of its upper Surface.
- 335 Decurrentes (153) running down the Branch.
- 336 Vaginantcs (157) surrounding the Stem like a Sheath.
- 337 Subulatæ, (269) awl-shaped.
- 338 Lanceolatae, (167) lance-shaped.
- 339 Sagittatae, (179) arrow-shaped.
- 340 Lunatae, (178) moon-shaped.
- 341 Erectae, (130) upright.
- 342 Patentes, (134) spreading.
- 343 Interrigimæ, (193) entire.
- 344 Serratae, (195) sawed.
- 345 Ciliatae, (196) lashed like the Eye.
- 346 Dentatae, (197) toothed.
- 347 Fissæ, (183) split.

CIRRHUS, a TENDRILL OF CLASPER.

- 348 Axillaris, (113) at the Insertion of the Branch.
- 349 Foliaris, sitting on a Leaf.
- 350 Petiolaris, growing on the Footstalk of the Leaf, (290)
- 351 Peduncularis, (296) growing on the Footstalk of the Flower.
- 352 Simplex, undivided.
- 353 Trifidus, divided in three Parts.
- 354 Multifidus, divided in many Parts.
- 355 Convolutus, twisting in the same Direction as the Sun, in Rings.
- 356 Revolutus, revolute, rolled back in half spiral Rings.

PUBES, DOWN OR PUBESCENCE.

- 357 Pili, excretory Ducts, long distinct Hairs.
- 358 Lana, Wool, curled Hairs and thick.
- 359 Barba, bearded, Tufts of parallel Hairs.
- 360 Tomentum, Down, Hairs scarcely conspicuous.
- 361 Strigæ, strong hard flat Hairs.
- 362 Setæ, Bristles, rigid round Hairs.
- 363 Simpliccs, single, not divided.
- 364 Hamosæ, hooked, by which they easily adhere to Animals.

390 AN EXPLANATION OF

- 365 *Ramosæ*, f. *Furcatæ*, subdivided into little Branches, or forked.
- 366 *Plumosæ*, feathery, composed of fine Down, or Hairs.
- 367 *Stellatæ*, starry, disposed cross-wise.
- 368 *Hami*, hooks, Prickles with recurved Points.
- 369 *Glochides*, Prickles with the Points turned back, having many Teeth.
- 370 *Glandula*, glands, little Teats for throwing out the excrementitious Humour of Plants; these are either *Sessiles*, squat; *Stipitata*, having a Footstalk; or, *Porus*, having a Pore, often perforating a Leaf.
- 371 *Utriculus*, little Vessels replete with secretory Liquor.
- 372 *Foliacei*, inserted in the Leaves.
- 373 *Petiolares*, (350) inserted in the Foot-stalk of the Leaf.
- 374 *Pedunculares* (351) inserted in the Foot-stalk of the Flower.
- 375 *Stipulares*, (291) inserted in the Stipula.
- 376 *Viscositas*, a Humour of a clammy Quality.
- 377 *Glutinositas*, a Humour whose Quality is of a lubricating slippery Nature.

A R M A, A R M S.

- 378 *Aculei*, sharp Prickles fixed in the Bark of Plants.
- 379 *Recti*, straight, without bending.
- 380 *Incurvi*, bent inwards.
- 381 *Recurvi*, bent outwards.
- 382 *Furcæ*, Prickles divided into many Forks.
- 383 *Bifidæ*, & *Trifidæ*, by two, and three, or according to the Number of Divisions.
- 384 *Spina*, a Spine, a Prickle fixed in the Wood of the Trunk, or Branch.
- 385 *Terminalis*, terminating the Branch.
- 386 *Axillaris*, (113) growing from the Insertion of the Branch.
- 387 *Calycina*, growing on the Cup.
- 388 *Foliaris*, (349) growing on the Leaf.
- 389 *Simplex*, (363) single.
- 390 *Divisa*, divided at the Point.
- 391 *Stimuli*, Stings, that make inflammatory Punctures, which go off with an Itching.

B R A C T E Æ, F L O R A L L E A V E S.

- 392 *Coloratæ*, (210) coloured.
- 393 *Caducæ*, (273) falling off with the Flower.
- 394 *Decidua*, (272) falling off.
- 395 *Persistentes*, (274) abiding.
- 396 *Comæ*, a *Bractea*, terminating the Stalk above the Flower, distinguished by its Magnitude or Colour.

PEDUN-

BOTANIC TERMS. 391

PEDUNCULUS, FOOT-STALK of a FLOWER.

- 397 *Partialis*, in some Flowers growing from the common Foot-stalk.
- 398 *Communis*, a Foot-stalk common to many Flowers.
- 399 *Pedicellus*, a little Foot-stalk, proper to Flowers that have a common Foot-stalk, (398)

400 *Scapus*, a Peduncle rising from the Root resembling a Stalk PLACE.

- 401 *Radicalis*, (110) springing from the Root.
- 402 *Caulinus*, (111) springing from the Stem.
- 403 *Rameus*, (112) growing from the Branch.
- 404 *Petiolaris*, (350) growing from the Petiole.
- 405 *Cirrhiferus*, (292) growing from the Tendril or Clasper.
- 406 *Terminalis*, (385) terminating the Branch.
- 407 *Axillaris*, (113) at the Insertion of the Branch or Leaf.
- 408 *Oppositifolius*, (328) having opposite Leaves.
- 409 *Lateriflorus*, (325) flowering at the Sides.
- 410 *Intrafoliaceus*, (327) within the Leaves.
- 411 *Extrafoliaceus*, (326) on the Outside of the Leaves.

SITUATION.

- 412 *Alterni*, (115) alternate.
- 413 *Sparsi*, (118) scattered.
- 414 *Oppositi*, (126) opposite.
- 415 *Verticillati*, (128) in Circles round the Stem.

NUMBER.

- 416 *Solitarius*, (324) single.
- 417 *Geminatus*, (323) by twos.
- 418 *Umbellula sessilis*, many Peduncles from the same Centre, produced of the same Height.

DIRECTION.

- 419 *Adpressus*, (133) pressed towards the Stem.
- 420 *Erectus*, (130) upright.
- 421 *Patens*, (134) spreading.
- 422 *Cernuus*, the Point looking downwards.
- 423 *Resupinatus*, (144) looking upwards.
- 424 *Declinatus*, (34) bent downwards archwise.
- 425 *Nutans*, (36) nodding, hanging downward.
- 426 *Flaccidus*, slender, weak, when the Weight of a proper Flower makes it hang downwards.
- 427 *Ascendens*, (33) rising upwards archwise.
- 428 *Pendulus*, hanging loose.
- 429 *Strictus*, (29) straight.
- 430 *Flexuosus*, bending from one Flower to another.
- 431 *Retrofractus*, bent backward and forward, as if broken.
- 432 *Uniflorus*, *Biflorus*, *Triflorus*, &c. *Multiflorus*, one Flower, two Flowers, three Flowers, &c. many Flowers according to the Number of Flowers growing on the Footstalk.

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STRUCTURE.

- 433 Teres, (47) round, like a Cylinder.
- 434 Triqueter, (52) three-sided.
- 435 Tetragonus, (53) four-angled.
- 436 Filiformis, thread-shaped, every where of equal Thickness.
- 437 Attenuatus, lessening gradually in Thickness towards the Point.
- 438 Clavatus, clubbed, thick towards the Point, (299)
- 439 Incrassatus, gradually thickening upwards.
- 440 Nudus, (215) naked.
- 441 Squamosus (58) scaly.
- 442 Foliatus (56) leafy.
- 443 Bracteatus, (295) furnished with floral Leaves.
- 444 Geniculatus (43) jointed.
- 445 Articulatus, (84) knotted.

INFLORESCENTIA, INFLORESCENCE,

Is the Manner by which Flowers are joined to the Plant by the Peduncle or Foot-stalk.

- 446 Verticillus, whorled, many Flowers growing round the Stalk in a Circle.
- 447 Sessiles, squat, without any manifest Footstalk.
- 448 Pedunculatus, a Peduncle elevating the Flowers.
- 449 Nudus, (450) (451) opposite to the following.
- 450 Involucratu, (520) furnished with an Involucrum.
- 451 Bracteatus, (443) having floral Leaves.
- 452 Confertus, Foot-stalks crowded together.
- 453 Distans, the Foot-stalks distant.
- 454 Capitulum, a Head, Flowers collected into a Globe or Head.
- 455 Subrotundum, (456) nearly of a globular Figure, almost round.
- 456 Globosum, globular, perfectly round.
- 457 Dimidiatum, halved, like a Globe cut into two Parts.
- 458 Foliosum, leafy, Leaves intermixed with the Flowers.
- 459 Nudum, naked, without Leaves or Bristles.
- 460 Fasciculus, bunched, a Flower growing in Bunches.
- 461 Spita, sessile Flowers growing alternate on a common Peduncle.
- 462 Simplex, a single Spike, undivided.
- 463 Composita, many little Spikes growing from the common Peduncle.
- 464 Glomerata, many little Spikes crowded together.
- 465 Ovata, (160) Egg-shaped.
- 466 Ventricosa, (256) swollen, gouty.
- 467 Cylindrica, pillar-shaped.
- 468 Interrupta, Spikes alternately smaller.
- 469 Imbricata, (120) scaled.

470 Arti-

- 470 *Articulata* (84) knotted, jointed.
- 471 *Ramosa*, branching variously.
- 472 *Linearis* (169) linear, of equal Width, lengthwise.
- 473 *Ciliata* (196) lashed.
- 474 *Foliacea*, leafy.
- 475 *Comosa*, terminating in little Leaves.
- 476 *Corymbus* (461) a Kind of Spike, whose Flowers are furnished with Footstalks, so proportioned to their Situation, as to elevate all the Flowers of the Spike to the same Height.
- 477 *Thyrus* (489) a Kind of crowded Panicle of an ovate Form.
- 478 *Racemus*, a Bunch of Flowers, the Peduncles coming at the Sides.
- 479 *Simplex*, undivided.
- 480 *Compositus*, divided into many.
- 481 *Unilateralis*, all the Flowers growing on one Side.
- 482 *Secundus*, the Flowers all bending to one Side.
- 483 *Pedatus* (281) the Foot-stalk coming on one Side like the Toes of the Feet.
- 484 *Conjugatus* (278) joined by twos.
- 485 *Erectus* (130) upright.
- 486 *Laxus* (31) loose, not closely connected.
- 487 *Nudus* (459) naked.
- 488 *Foliatus* (56) leafy.
- 489 *Panicula*, Flowers scattered on Peduncles that are divided in different Forms.
- 490 *Simplex*, always few Flowers.
- 491 *Composita*, many Florets coming together.

FRUCTIFICATIO, FRUCTIFICATION.

Temporary Parts of Vegetables called the Generation.

- 492 *Calyx*, a Flower Cup, is the Termination of the outer Bark of the Plant, present in the Fructification.
- 493 *Perianthium*, a Flower Cup, whose Station is close to the Fructification.
- 494 *Fructificationis*, when it includes the Stamina and Germen.
- 495 *Floris*, containing the Stamina without the Germen.
- 496 *Fructus*, containing the Germen without the Stamina.
- 497 *Proprium*, without respect to the Flower.
- 498 *Monophyllum*, consisting of one Leaf.
- 499 *Polyphyllum*, consisting of many Leaves.
- 500 2—5 *Fidum* (183) divided into two, three, four, or five Divisions.
- 501 2—5 *Partitum* (186) divided almost to the Base from two to five.
- 502 *Integrum*, entire (171) undivided.
- 503 *Tubulosum* (262) tube-shaped.

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- 504 Patens (134) spreading.
- 505 Reflexum, the Parts bent backwards.
- 506 Inflatum, puffed out like a Bladder.
- 507 Abreviatum, shorter than the Tube of the Corolla.
- 508 Obtusum (205) the Divisions rounded.
- 509 Acutum (210) the Divisions sharp.
- 510 Spinosum (75) bearing Spines.
- 511 Aculeatum (244) bearing Prickles.
- 512 Superum, when the Germen is below the Receptacle.
- 513 Inferum, when the Germen is above the Receptacle.
- 514 Commune, a common Calyx, containing many Florets as
in compound Flowers.
- 515 Imbricatum, scaled, various Scales lying over one another.
- 516 Squarrosus, with Scales pointing many Ways.
- 517 Scariosus, having Scales; their Margins are membrana-
ceous, hard, dry, and sounding when touched.
- 518 Turbinatum, top-shaped, like an obverse Cone.
- 519 Calyculatum, when a lesser Calyx is added, and encircles
the Base of the larger one.
- 520 Involucrum, a Kind of Calyx standing remote from the
Flower.
- 521 Universale, in umbelliferous Plants, standing under the
universal Umbel.
- 522 Partiale, an Involucrum, standing under the partial Umbel.
- 523 Proprium, always under the Flower.
- 524 Gluma, a Husk, a Cup belonging to Grasses, whose Flowers
it embraces with the Valves folded over.
- 525 Uniflora, when it embraces one Flower.
- 526 Multiflora, when it includes many Flowers.
- 527 Univalvis, when there is constantly but one Scale.
- 528 Bivalvis, when there is two Valves.
- 529 Multivalvis, when there are many Scales or more than two.
- 530 Colorata, (219) coloured.
- 531 Glabra (216) smooth.
- 532 Hispida (243) covered with hard Hairs.
- 533 Mutica, without Point, or Arista.
- 534 Arista, an awl-shaped Beard, growing on the Husk.
- 535 Terminalis, terminating and fixed to the Top of the Husk.
- 536 Dorsalis, fixed on the Outside of the Husk.
- 537 Recta, growing perpendicular.
- 538 Tortilis, twisted.
- 539 Geniculata (43) jointed.
- 540 Recurvata (139) recurved.
- 541 Amentum, ex Receptaculo (635) a Catkin proceeding
from a common Receptacle, resembling the Chaff of
Corn.

- 542 Spatha, a Sheath, a Kind of Cup burking out lengthwise.
- 543 Univalvis, of one Valve, opening on one Side.
- 544 Dimidiata, halved, the inner one covering the Fructification on one Side, and the outer one on the other.
- 545 Calyptra, a Veil, or Hood, covering the Antheræ, in Mosses.
- 546 Recta, straight, every where equal.
- 547 Obliqua, oblique, bent on one Side.
- 548 Volva, a membranaceous Calyx belonging to the Fungi.
- 549 Approximata, close to the Head.
- 550 Remota, at some Distance from the Head.
- 551 Corolla, the Termination of the inner Bark, present in the Flower.
- 552 Petalum, a Petal, a Part of the Corollæ when divided into many.
- 553 Tubus, a Tube, the lower part of a Flower with one Petal.
- 554 Unguis, a Claw, the lower Part of a polypetalous Flower, by which it is fixed to the Receptacle.
- 555 Limbus, the upper Part of a monopetalous Flower expanded.
- 556 Lamina, the upper spreading Part of a polypetalous Flower.
Monopetala, vel Polypetala, &c. from one to many Petals, or according to the Number.
- 557 Regularis, of an equal Figure, the Size of all the Parts proportioned to one another.
- 558 Irregularis, when the Limb, and other Parts are disproportionate.
- 559 Inæqualis, when the different Sizes of the Parts do not correspond, but in Proportion to one another.
- 560 Globosa, globe-shaped.
- 561 Campanulata, bell-shaped.
- 562 Infundibuliformis, funnel-shaped.
- 563 Rotata, wheel-shaped.
- 564 Hypocrateriformis, salver-shaped.
- 565 Ringens, gaping, irregular, with two Lips.
Galea, the upper Lip gaping.
Labium, instead of gaping, the lower Lip stands forwards.
- 566 Faux, the Jaws gaping between the Divisions of the Corollæ, where the Tube terminates.
- 567 Personata (565) gaping, but shut between the Lips with a Palate.
- 568 Cruciata, having four equal spreading Petals.
- 569 Concava (248) hollow.
- 570 Patens (134) spreading.

396 AN EXPLANATION OF

- 571 *Papilionacea*, butterfly-shaped, irregular. *Carina*, the Keel, the lower Petal often in Form of a Boat. *Vexillum*, the Standard, or upper Petal ascending. *Alæ*, the Wings, standing single on each Side.
- 572 *Composita*, compound Flowers, having many Florets in a common Perianthium, above the common Receptacle.
- 573 *Ligulata*, tongue-shaped, Florets whose Limb is plane, and expanded outward.
- 574 *Tubulosa*, Florets that are all tubular and equal.
- 575 *Radiata*, when the Florets are tubular in the Disk, and radiate and ligulate in the Margin.
- 576 *Nectarium*, Honey-pores, that Part of the Flower bearing Honey.
- 577 *Proprium*, properly so called, as a distinct Part from the Petal.
- 578 *Petalinum*, when inserted into the Petal.
- 579 *Stamen*, the male Organ of Generation furnished with a Viscus, designed for the Preparation of the Pollen.
- 580 *Filamentum*, Threads, the Part that elevates, and is connected to the *Antheræ*.
- 581 *Æqualia*, equal, when they are all of an equal Length.
- 582 *Inæqualia*, unequal, when some are long, and others short.
- 583 *Connata*, when joined in one Body, but their Number, Figure, and Insertion expressed.
- 584 *Anthera*, that Part of the Flower big with the Pollen, which it emits when come to maturity.
- 585 *Distinctæ*, not cohering.
- 586 *Connatæ*, joined by the Sides into one Body.
- 587 *Pollen*, Powder, of the *Antheræ*, destined for the Impregnation of the Germen, and bursting in a viscous Humour, into fine Atoms, is by a prolific Blast scattered on the Stigma.
- 588 *Pistillum*, a viscous Humour adhering to the Fruit for the Reception of the Pollen, and is the female Organ of Generation.
- 589 *Germen*, the immature Rudiment of the Fruit within the Flower.
- 590 *Superum*, when included in the *Corollæ*.
- 591 *Inferum*, when below the *Corollæ*.
- 592 *Stylus*, that Part of the *Pistillum* which elevates the Stigma from the Germen.
- 593 *Stygma*, the female Uterus, at the Top of the Pistil, furnished with a moist Humour.
- 594 *Pericarpium*, the Womb of the Plant big with the Seeds, which it emits when mature.

- 595 Capsula, a hollow Pericarpium, which cleaves or opens in some determinate Manner.
- 596 Valvula, an Opening, a Part of a Capsule, or outer Cover to the Fruit.
- 597 Loculamentum, a Kind of arched Cell, for the Lodgement of the Seeds.
- 598 Dissepimentum, Partitions of the Fruit, which divide the Pericarpium into Cells.
- 599 Bicapsularis, two Capsules, Tricapsularis, &c. three Capsules, or according to the Number.
- 600 Bilocularis, &c. two Cells, &c. according to the Number.
- 601 Tricocca, a Capsule with three protuberant Knobs, which divide into three Cells.
- 602 Didyma, a Capsule with two gibbous Knobs, which divide into two Cells.
- 603 Siliqua, a Pericarpium of two Valves, in which the Seeds are fixed alternately to the opposite Sutures.
- 604 Compressa, flattened, the opposite Sides coming nearly together.
- 605 Torulosa, brawny Protuberances, when the Pericarpium is bunched out by the Seeds.
- 606 Articulata, interrupted by arched Joints.
- 607 Parallelum Dissepimentum, the Width, or Diameter of the Dissepiment to which the Valves adhere.
- 608 Transversum Dissepimentum, Dissepiments running cross-wise.
- 609 Legumen, a Pericarpium of two Valves, the Seeds fixed to one Suture only.
- 610 Isthmus Interceptum, Pods with various Cross-divisions, forming distinct Cells.
- 611 Folliculus, a Pericarpium of one Valve, gaping lengthwise on one Side, without the Seeds being fixed to the Suture.
- 612 Drupa, a pulpy Pericarpium, without Valves, containing a Stone or Nut (633)
- 613 Succulenta, containing a pulpy Humour.
- 614 Sicca, opposite to the foregoing, dry.
- 615 Pomum, an Apple, a fleshy Pericarpium without Valves, containing a Capsule.
- 616 Bacca, a Berry, a pulpy Pericarpium without Valves, containing naked Seeds.
- 617 Nidulantia, Seeds nestling in the Pulp of a Berry.
- 618 Strobilus, a Pericarpium formed from an Amentum, with hard Scales lying over each other, as in the Pine Tree.
- 619 Se-

398 AN EXPLANATION OF

- 619 Semen, Seed, the Rudiment of a new Plant; are known according to the Number, Figure, Superficies, and Consistence.
- 620 Hilum, the Eye, an external Scar of the Seed, where it has been fixed to the Fruit or Receptacle.
- 621 Corculum, the Effence of a new Plant within the Seed.
- 622 Plumula, Part of the Corculum, the ascending scaly Part of the Plant.
- 623 Rostellum, the descending Part of the Corculum that forms the Root.
- 624 Cotyledon, the side Lobes of the Seed of a porous Substance, and perishing.
- 625 Corona a Crown, a little Cup adhering to the Top of the Seed, by which it flies.
- 626 Pappus, a downy feathered Cup, adhering to the Top of the Seed, by which it flies.
- 627 Stipitatus, a Kind of thread-like Trunk, elevating the Down, and connecting it with the Seeds.
- 628 Capillaris, Hairs undivided.
- 629 Plumosus, having feathery Hairs.
- 630 Cauda, a Thread terminating the Seed.
- 631 Hamus, a hooked Seed adhering to Animals.
- 632 Ala, a membranaceous Wing, fixed to the Seed.
- 633 Nux, a Nut, a Seed covered with a bony epidermis, having one, two, or more Cells.
- 634 Arillus, the proper exterior Coat of a Seed that falls off spontaneously, and is either cartilagineous, or succulent.
- 635 Receptaculum, the Base, by which the Parts of Fruetification are connected.
- 636 Commune, containing many Flowers and Fruit.
- 637 Punctatum, a Receptacle marked with hollow Punctures.
- 638 Pilosum (241) hairy.
- 639 Paleaceum, chaffy Scales which distinguish the Florets.
- 640 Planum (246) plain, a flat Surface.
- 641 Convexum (249) the Disk elevated.
- 642 Conicum, cone-shaped, rounded and lessening towards the Point.
- 643 Subulatum (269) awl-shaped.
- 644 Compositus-flos, a compound Flower, with the Receptacle spread out and entire, the Florets sessile.
- 645 Aggregatus flos, an aggregate Flower, the Receptacle enlarged, and the Florets on little Peduncles.
- 646 Umbella, an Umbel, a Receptacle which from a common centre, runs out into thread-shaped Footstalks of proportionate Lengths.

647 Sim-

- 647 Simplex, when the Footstalks proceed from one and the same Centre of the Receptacle.
- 648 Composita, when every Footstalk of the general Umbel produces a partial Umbel.
- 649 Universalis, composed of many simple Umbels.
- 650 Partialis, a little Umbel, a Part supported by the universal Umbel.
- 651 Prolifera, an Umbel more than decompound.
- 652 Cyma, a Receptacle producing many Foot-stalks from the same Centre, that are of unequal Lengths, the partial ones irregular on long fastigate Peduncles.
- 653 Rachis, a thread-shaped Receptacle, the Flowers adhering to it lengthwise, and forming a Spike.
- 654 Spadix, a Receptacle of a Palm, produced within a Spatha or Sheath, divided into Branches that bear the Fruit.
- 655 Bulbus, is an Hybernacle placed on the descending Caudex, and contains the Rudiment of the Plant and Leaf that perishes.
- 656 Solidus, a solid fleshy Bulb, without any internal Divisions.
- 657 Tunicatus, Bulbs having Coats lying over each other like the Onion.
- 658 Squamatus, Bulbs consisting of imbricated Scales, as in the Lily.
- 659 Caulinus, Bulbs growing on the Stalk of the Plant.
- 660 Gemma, a Bud, is an Hybernacle of the future Plant with its Leaves.
- 661 Petiolaris, inclosing the Rudiment of the Leaves.
- 662 Stipularis, inclosing the Stipula.
- 663 Corticalis, consisting of cortical Squamæ.
- 664 Foliaris, containing the Leaf and not the Flowers.
- 665 Floralis, containing the Flowers and not the Leaf.
- 666 Communis, containing both the Leaf and the Flowers.
- 667 Vernatio, the Position of the Leaf within the Bud.
- 668 Conduplicata, when the parallel Sides of a Leaf approach.
- 669 Convoluta, rolled together in a spiral Form.
- 670 Involuta, rolled inwards spirally from the lateral Margins.
- 671 Revoluta, rolled spirally backwards from the lateral Margins.
- 672 Obvoluta, rolled together, one Margin embracing the other alternately.
- 673 Equitantia, when the Sides of the Leaves lie parallel, the outward one embracing the inner one.
- 674 Imbricata, a parallel straight Surface, lying over each other.

400 AN EXPLANATION OF

- 675 Plicata, plaited, when their Complication is in Plaits lengthwise.
- 676 Reclinata, retlined, reflexed downward towards the Petiole.
- 677 Spiralia, spiral, twisted in transverse Plaits, so that the Apex becomes the Centre.
- 678 Æstivatio, the Complication of the Corollæ, before the unfolding of the Flower.
- 679 Convoluta, rolled together (669)
- 680 Imbricata (674) imbricate.
- 681 Conduplicata (668) when the parallel Sides of the Leaf approach.
- 682 Valvata, having Valves.
- 683 Inæquivalvis, with unequal Valves.
- 684 Somnus, Sleep, the Change that Leaves of Plants undergo in the Night.
- 685 Connivens, when the upper Disk of two opposite Leaves or Foliolæ are pressed together so as to appear one Leaf.
- 686 Includens, when the Leaves are alternate, and in the Night press against the Stalk, so as to include it.
- 687 Circumseprens, when Leaves growing in an horizontal Position, erect themselves in the Night, by clasping together in the Form of a Funnel.
- 688 Moniens, when the Leaves have Footstalks spreading horizontally, become dependent in form of an hollow Arch.
- 689 Conduplicans, doubling, when the Foliolæ lightly approach each other with their upper Disk, so that both are covered.
- 690 Involvens, when the Points of the upright Foliolæ are pressed together, and form a Cavity between.
- 691 Divergens, when the Base of the Foliolæ approach, and the Points are spreading.
- 692 Dependens, when the Foliolæ hang downwards.
- 693 Invertens, when the Foliolæ hang down, and are at the same Time inverted.
- 694 Imbricans, the Foliolæ imbricated (120)

MENSURA, their MEASURE.

- 695 Linearis, linear, the twelfth Part of an Inch.
- 696 Unguicularis, the Length of a Nail.
- 697 Policaris, the Length of the outward Joint of the Thumb.
- 698 Palmaris, the Width of the Hand.

699 Spi-

401

- D d G L O S

A G L O S S A R Y;

EXPLAINING THE TECHNICAL TERMS

IN B O T A N Y: IN ALPHABETICAL ORDER.

A

A *Breviatum perianthium*, shortened, when the Cup is shorter than the Tube of the Flower.

Abortiens flos, barren Flowers, such as produce no Fruit.

Abruptum folium pinnatum, winged Leaves, ending without either Foliole or Cirrhus.

Acaulis, without Stalk or Stem.

Acerosum folium, chaffy Leaves, when they are linear and abiding, as in *Pinus*, *Abies*, and *Juniperus*.

Acicularis, Needle-shaped, as in *Scirpus acicularis*.

Acinaciforme, Falchion or Scimitar-shaped, as in *Mesembryanthemum acinaciforme*.

Acini, the small Berries which compose the Fruit of a Mulberry or Bramble.

Acotyledones, Plants, whose Seeds have no Cotyledons or seminal Leaves.

Aculei, Prickles, fixed in the Rind or Surface of the Bark.

Aculeatus caulis, a Stalk, or Stem, furnished with Prickles.

Acuminatum folium, a Leaf ending in a Point.

Acutum folium, Leaves terminating in an acute Angle.

Adnatum folium, the Disk of the Leaf pressing close to the Stem of the Plant.

Adpressa folia, the Disk of the Leaf pressed towards the Stem.

Adscendens caulis, a Stalk or Branch inclining upwards.

Adversum folium, when the Sides of the Leaf are turned towards the South.

Aggregatus flos, an Assemblage of Flowers coming in Clusters.

Aggregatus,

Aggregatæ, an Order of Plants in the *Fragmenta methodi naturalis* of *Linneus*.

Ala, a Wing, the Side Petals of a papilionaceous Blossom, or a Membrane added to a Seed, Stalk, &c.

Alatus petiolus, when the Foot-stalk of a Leaf is winged with Membranes.

Alburnum, the white Substance that lies between the inner Bark and the Wood of Trees.

Algæ, Flags, one of the seven Families of Plants.

Alterni Rami folia, when they come out singly, and follow in gradual Order.

Amentaceæ, an Order of Plants in the *Fragmenta methodi naturalis* of *Linneus*, bearing Catkins.

Amentum, a Catkin.

Amplexicaule folium, embracing the Stalk when the Base of the Leaf embraces the Stem Sideways.

Anceps caulis, double-edged, when a Stalk is compressed, and forms two opposite acute Angles.

Androgyna, Plants bearing male and female Flowers on the same Root.

Angulatus caulis, angulated Stalks.

Angustifolia, narrow-leaved.

Angiospermia, the second Order in the Class *Didynamia* of *Linneus*; containing Plants whose Seeds are covered with a Capsule.

Annua radix, an annual Root; that which lives but one Year.

Anthera, the Summit of the Stamina bearing the Pollen, and is a Part of the principal male Organ of Generation.

Apertura, an Aperture, opening in some Species of *Anthera*.

Apetalus flor, having no Petals or Corolla.

Apex, the Top, or Summit.

Aphyllus caulis, destitute of Leaves.

Apophysis, an Excrescence from the Receptacle of the Musci.

Appendiculatus petiolus, a little Appendage hanging from the Extremity of the Foot-stalk.

Approximata folia, Leaves growing near each other.

Arbor, a Tree.

Arbustiva, a Copsé of Shrubs or Trees, an Order of Plants in the *Fragmenta methodi naturalis* of *Linneus*.

Arcuatum legumen, arched, a Pod that is curved or bent.

Arillus, the proper exterior Coat of a Seed that falls off spontaneously.

Arista, the Beard of Corn or Grasses.

Arma, Arms, Weapons, one of the seven Kinds of *Fulcra* of Plants.

- Articulatus caulis*, Culmus, having Knots or Joints.
Articulus culmi, the straight Part of the Stalk between the two Joints.
Asperifolia, rough-leaved Plants, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
Affurgentia folia, first bent down, but rising erect towards the Apex.
Attenuatus pedunculus, when the Foot-stalk grows smaller towards the Flower.
Auctus calyx, augmented, having a Series of distinct Leaves, shorter than its own, that surround its Base.
Avenia folia, Leaves which have no visible Veins.
Auriculatum folium, an Ear-shaped Leaf, when the Leaf towards the Base has a Lobe on each Side.
Axillaria folia, growing out of the Angles formed by the Branches and the Stem.

B

- Bacca*, a Berry; or a pulpy Pericarpium without Valves, in which the Seeds are naked.
Barba, a Beard, a Species of Pubescence, sometimes on the Leaves of Plants, as on the *Mesembryanthemum barbatum*.
Barbatum folium, when a Bunch of strong Hairs terminate the Leaves.
Bicornes, Plants whose Antheræ have the Appearance of two Horns Likewise an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
Biennis radix, a Root which continues to vegetate two Years.
Bifaria folia, a Leaf pointing two Ways.
Biferæ plantæ, flowering twice a Year.
Bifidum folium, divided or cloven into two Parts.
Biflorus pedunculus, bearing two Flowers on a Foot-stalk.
Bigeminum folium, a forked Foot-stalk, with two little Leaves on the Apex of each Division.
Bijugum folium, a winged Leaf, bearing two Pair of Foliola.
Bilabiata corolla, a Corolla with two Lips
Bilobum folium, a Leaf consisting of two Lobes.
Binata folia, a digitate Leaf, consisting of two foliola.
Bipartitum folium, a Leaf divided into two Segments,
Bipinnatum folium, doubly winged, when the Foliolæ of a pinnate Leaf are pinnate.
Biternatum folium, when there are three Foliolæ on a Petiole, and each Foliolæ is ternate; as in *Epimedium*.
Bivalve pericarpium, consisting of two Valves, as in the *Siliqua* and *Legumen*.

Brachiatus

Brachiatus caulis, branching in Pairs; each Pair standing at right Angles with those above and below.

Brachium, the Arm, tenth Degree in the *Linnean* Scale for measuring Plants, being twenty-four Parisian Inches.

Bractæa, a floral Leaf, these are generally of a different Shape, and Colour from the other Leaves of the Plant, and are always seated near the Fructification.

Bracteatus, having a *Bractea* growing out of it.

Bulbiferus caulis, a stalk bearing Bulbs, as in a Species called *Lilium bulbiferum*.

Bulbosa radix, a bulbous Root, and is either *Squamosa*, scaly, as in *Lilium*; *tunicata*, coated, as in *Cepæ*; *duplicate*, double, as in *Fritillaria*; or *Solida*, as in *Tulipa*.

Bullatum folium, when the Surface of the Leaf rises above Veins, so as to appear like Blisters.

C

Caducus calyx, to fall off; a Term signifying the shortest Time of Duration, falling off at the first opening of the Flower.

Calamariæ, a Reed, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Calcarium nectarium, a kind of Nectarium resembling a Spur, as in the *Delphinium*.

Caliculatus calyx, a little Calyx added to a larger one, as in the *Coreopsis*, *Leontice*, &c.

Calycanthemis, a *calyx*, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Calyptra, a Veil, in Mosses, where it is placed over the *Antheræ*.

Calyx, a Flower Cup of which there are the following Kinds, viz. *Perianthium*, *Involucrum*, *Amentum*, *Spatha*, *Gluma*, *Calyptra*, and *Volva*.

Campanacei, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Campanulata corolla, Bell-shaped Flowers.

Canaliculatum folium, Leaves having a deep Channel running from the Base to the Apex.

Candelares, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Capillaceum folium, Capillary, exemplified in the *Ranunculus aquatilis*.

Capillaris pappus, hairy Down, as in *Hieracium*, and *Sonchus*.

Capillus, Hair, the first Degree of the *Linnean* Scale for measuring

- suring Plants, the Diameter of a Hair, and the twelfth Part of a Line.
Capitati flores, Flowers collected into Heads, as in *Mentha aquatica*, and *Thymus serpyllum*.
Capitulum, a little Head, a species of Inflorescentia, in which the Flowers are connected into close Heads on the Tops of the Peduncles as in *Gomphrena*.
Capreolus, a tendril, see *Cirrus*.
Capfula, a Capsule, a hollow Pericarpium, which cleaves or parts in some determinate Manner, and consists of *Valvula* *Dissepimentum*, *Columella*, and *Loculamentum*.
Carina, the Keel of a Boat, or Ship, the lower Petal of the papilionaceous Corolla.
Carinatum folium, when the Back of a Leaf resembles the Keel of a Ship.
Cariophyllæus flos, Clove-tree, or Flowers growing in the manner of Carnations.
Carnosum folium, a fleshy Leaf, as in *Sedum dasylphyllum*.
Cartilagineum folium, a Leaf whose Brim is furnished with a Margin of different Substance from the Disk.
Caryophylli, Carnations or Pinks, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
Catenulata scabrities, species of glandular Roughness, hardly visible to the naked Eye, resembling little Chains on the Surface of some Plants.
Caudex, the Stem of a Tree
Caulescens, having a Stalk or Stem.
Caulina folia, Leaves growing immediately on the Stem.
Caulis, a Stem, a Species of *Truncus*.
Cernuus, nodding, or hanging down its Head.
Cespitosa, Plants which produce many Stems from one Root, and form a Surface of Turf or Sod.
Ciliatum, whose Margin is guarded by parallel Bristles, formed like the Eye-lash
Circinalæ folia, a Hoop or Ring, a Term of Foliation, expressive of the Leaves within the Gemma being rolled spirally downward.
Circumscissa capsula, cut transversely, as in *Anagallis*
Cirrhiferus pedunculis, a Peduncle bearing a Tendril, as in *Vitis*.
Cirrhosum folium, a Leaf that terminates in a Tendril, as in *Gloriosa*.
Cirrus, a Clasper, or Tendril, one of the Fulcra of Plants.
Classis, a Class, is defined by *Linnaeus* to be an Agreement of several Genera in the Parts of Fructification, according to the Principles of Nature distinguished by Art.

Clavatus

- Clavatus petiolus, pedunculus*, when the Foot-stalk of the Leaf or Flower is Club-shaped, tapering from the Base to its Apex.
- Clavicula*, a little Key, a Tendril.
- Clausæ corollæ*, when the Neck of the Corolla is close shut in with Valves.
- Coadunatæ*, to gather together, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Coarctati rami*, close together, opposed to *Divaricatus*.
- Cochleatum legumen*, a Pod like the Shell of a Snail, as in *Medicago*.
- Coloratum folium* coloured, when Leaves which are generally green, are of a different Colour.
- Columnella*, a little Column, the Substance that passes through the Capsule, and connects the several Partitions and Seeds.
- Columniferi*, Pillar-shaped, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Comma*, a Bush, or Head of Hair, a Species of *Fulcra*, composed of large Bractææ, which terminates the Stalk as in *Lavandula*, *Salvia*, &c.
- Communis gemma*, regards the Contents of the Gemma, containing both Flower and Fruit.
- Communis calyx*, when a Cup contains both Receptacle and Flower.
- Comosæ*, a Head of Hair, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Comosa radix*, the Fibres which put forth at the Base of a bulbous Root, resembling a Head of Hair.
- Compactum folium*, when the Leaf is of a compact and solid Substance.
- Completus flos*, having a Perianthium and Corolla.
- Compositus caulis*, a Compound Stem, diminishing as they ascend.
- Compositum folium*, when the Petiole bears more than one Leaf of which are the following Species, viz. *Articulatum*, *Digitatum*, *Conjugatum*, *Pedatum*, *Pinnatum*, *Decompositum*, *Supra-decompositum*.
- Compositi*, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Compressus caulis, folium*, a Leaf resembling a Cylinder compressed on the opposite Sides.
- Concavum folium*, hollowed, the Margin forms an Arch with the Disk.
- Conceptaculum*, Conceptacle or Receiver, a Pericarpium of a single Valve, which opens on the Side lengthways, and has not the Seeds fastened to it.
- Conduplicatum folium*, doubled together, when the Sides of the Leaf are parallel, and approach each other.

- Conferti rami*, Branches crowded together.
- Confertus verticillus, flos, et folia*, when Flowers and Leaves are formed into Whorles round the Stalk and crowded together.
- Confluentia folia*, to flow together, as in the pinnated Leaf, when the Pinnæ run into one another.
- Conglobatus flos* when Flowers are collected into globular heads.
- Conglomeratus flos*, Flowers irregularly crowded together.
- Congesta umbella*, Flowers collected into a spherical Shape, as in the *Allium*.
- Conica scabrities*, a Species of setaceous Scabrities, scarce visible to the naked Eye, on the Surface of Plants, formed like Cones.
- Coniferæ*, Plants bearing Cones, such as *Pinus*, *Cupressus*, &c. an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Conjugatum*, to join or couple together, a Species of pinnate Leaf, where the *Folioles* come by Pairs.
- Connatum*, to grow together, when two opposite Leaves unite at their Base, so as to have the Appearance of one Leaf.
- Connivens corolla*, when the Apices of the Petals converge, so as to close the Flower, as in *Trollius Europæus*.
- Conniventes antheræ*, approaching or inclining together.
- Continuum folium*, continued, when the Leaf appears to be a Continuation of the Substance of the Stalk.
- Contorti*, to twist, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Contrariæ valvulae*, Valves are termed *Contraria*, when the *Dissepimentum* is placed transversely between them.
- Convexum folium*, a Leaf rising from the Margin to the Center of the Leaf.
- Convolutus cirrhus*, a Tendril twining with the same Direction with the Sun's Motion.
- Convolutum folium*, a Term in Foliation, when the Leaf is rolled up like a Scroll of Paper.
- Conus*, see *Strobilus*.
- Corculum*, the Heart and Effence of the Seed.
- Cordatum folium*, the Heart-shaped Leaf.
- Cordiformus*, shaped like a Heart.
- Corolla*, a Wreath or Crown, one of the seven Parts of Fructification.
- Corollula*, a little Corolla.
- Corona seminis*, a Crown adhering to many Kinds of Seeds serving them as Wings, which enables them to disperse.
- Coronaræ* an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Coronula*, a little Crown.

Cortex,

- Cortex**, the outer Rind or Bark of Vegetables.
- Corydales**, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Corymbus** is a Kind of Spike, the Flowers of which have each its proper Pedicellus, or partial Foot-stalk raised to a proportional Height, as in *Spirea opulifolia*.
- Cotyledon**, a Side-lobe of the Seed, of a porous Substance, and perishable, or seminal Leaves
- Crenatum folium**, a notched Leaf, when the Margin is cut into Angles that point towards neither of the Extremities, obtusely crenate, when the Angles are rounded, or acutely crenate, when the Angles are pointed.
- Crispum folium**, a curled Leaf, when the Circumference becomes larger than the Disk admits of.
- Cristatus flos**, when the Flower has a tufted Crest, as in *Polygala*.
- Cruciformes flores**. Cross-shaped Flowers, consisting of four Petals, disposed in the Form of a Cross, as in the Class *Tetradynamia* of *Linnaeus*.
- Cryptogamia**, hidden Marriages, the twenty-fourth Class of the *Linnaean* System.
- Cubitus**, a Cubit the ninth Degree of the *Linnaean* Scale for measuring Plants, from the Elbow to the Extremity of the middle Finger or seventeen Parisian Inches.
- Cucullatum folium**, Leaves rolled up lengthways, in Form of a cone, as in *Geranium cucullatum*, &c.
- Cucurbitaceæ**, Gourds, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Culminæ**. the Top or Crown of any thing, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Culmus**, a Reed or Straw, the proper Stem or Trunk of a Grass.
- Cuspidatum folium**, a Leaf whose Apex resembles the Point of a Spear or Lance.
- Cuneiforme folium**, a Wedge-shaped Leaf.
- Cyathiformis corolla**, Flowers of the Form of a Cup.
- Cylindracea spica**, a Spike of Flowers in Form of a Cylinder.
- Cyma**, that runs into long fastigate Peduncles, proceeding from the same universal Center but with irregular partial ones.
- Cymosus flos**, see *Cyma*.
- Cymotæ**, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

D

- Dædaleum folium**, a Leaf whose Texture is remarkably beautiful and exquisitely wrought.
- Debilis caulis**, a weak, feeble Stalk.

Decagynia

- Decagynia**, ten Females, the fifth Order in the tenth Class ;
Flowers that have ten Styli.
- Decandria**, ten Males, the tenth Class of *Linnaeus*.
- Decaphyllus calyx**, a calyx consisting of ten Leaves.
- Deciduum folium**, Leaves that fall off in Winter.
- Declinatus caulis** a Stalk bending towards the Earth.
- Decomposita folia** when a Petiole once divided connects many Folioles.
- Decumbens**, to lie down.
- Decurrens folium**, running down, when the Base of a sessile Leaf extends itself downwards along the Stem, beyond the proper Base or Termination of the Leaf.
- Decursive folium, pinnatum**, when the Bases of the Foliole are continued along the Sides of the Petiolus.
- Decussata folia**, to divide, when Leaves grow in Pairs, and opposite, each Pair being opposite alternately.
- Deflexus ramus**, a Branch bent a little downwards.
- Deflorata stamina**, having shed or discharged the Farina fecundans.
- Defoliatio**, the Time in Autumn when Plants shed their Leaves.
- Deltoides folium**, a Leaf formed like the Greek Delta, as in *Mesembryanthemum deltoides*.
- Demersum folium**, in aquatic Plants, Leaves sunk below the Surface of the Water.
- Dendroides surculus**, Shrub-like, a Subdivision of the Surculus in the Genus Hypnum.
- Dentatum folium**, Leaves having horizontal Points of the same Consistence of the Leaf, and standing at a little Distance from each other.
- Denudatæ**, to be stripped naked, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Dependens folium**, to hang down, Leaves pointing towards the Ground.
- Depressum folium**, pressed down, when the Sides rise higher than the Disk.
- Diadelphia**, two Brotherhoods, the seventeenth Class in the sexual system.
- Diandria**, two Males, the Second Class in the sexual System.
- Dichotomus caulus**, forked Stalks, when the Divisions come by two and two.
- Dicotyledones**, when the Seeds have two Cotyledons that are the Placenta of the embryo Plant, and afterwards the Seed Leaves.
- Didyma anthera**, Twins, when Anthera come by two's on each Filament.
- Didynamia**, the Superiority of two, the fourteenth Class in the sexual System.

Difformia

- Difformia folia*, different Forms, when Leaves on the same Plant come of different Forms.
- Diffusus caulis*, when the Branches of the Stalk spread different Ways.
- Digitatum folium*, fingered, when the Apex of a Petiole connects many Folioles.
- Digynia*, two Females, the Second Order in each of the first thirteen Classes, except the ninth.
- Dimidiatum*, halved.
- Dioecia*, the twenty-second Class in the sexual System.
- Dipetala corolla*, Flowers consisting of two Petals, as in *Circea*, and *Commelina*.
- Diphyllus calyx*, a Calyx consisting of two Leaves, as in the *Papaver*, and *Fumaria*.
- Discus*, a Disk, the middle Part of a radiate compound Flower.
- Disperma*, Plants producing their Seeds by two's, as in the *Umbellatæ*.
- Difsectum folium*, Leaves cut into Lacinia, or Divisions.
- Dissepimentum*, Partitions of the Fruit, which divide the *Pericarpium* into Cells.
- Diffiliens siliqua*, Pods that burst with Elasticity.
- Distans verticillus*, when the Whorles of Flowers, in verticillate Plants, stand at a great distance from one another.
- Disticha folia*, in two Rows, when Leaves all respect two Sides of the Branches only.
- Divaricati rami*, Branches standing wide from each other in different Directions.
- Divergentes rami*, widening gradually.
- Dodecandria*, twelve Males, the eleventh Class in the sexual System.
- Dodrans*, the seventh Degree in the *Linnaean* Scale for measuring the Parts of Plants, or nine Parisian Inches.
- Dodrantalis*, nine Inches.
- Dolabriforme folium*, a Leaf resembling an Ax, as in *Mesembryanthemum dolabriforme*.
- Dorsalis arista*, an Awne, or Beard, fixed to the Back or external Part of the Gluma.
- Drupa*, a pulpy *Pericarpium*, without Valves, containing a Stone, as in the Plumb and Peach.
- Drupaceæ*, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Dumosæ*, a Bush, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Duplicata radix*, a double Root, a Species of bulbous Root, consisting of two solid Bulbs, as in some Species of *Orchis*.
- Dupli-

Duplicato serratum folium, sawed double, with lesser Teeth within the greater.

E

Ebracteatus racemus, without a Bractea, or floral Leaf.

Ecaudata corolla, without a Tail or Spur, as in *Antirrhinum*, *cymbalaria*.

Echinatum pericarpium, Pods beset with Prickles, like a Hedgehog.

Efflorescentia, the precise Time when a Plant shews its first Flowers.

Emarginatum folium, when the Apex of a Leaf terminates in a Notch; the same may be applied to Petala, and Stigma.

Enervium folium, Leaves having no apparent Nerves.

Enneandria, nine Males, the ninth Class in the sexual System.

Enneapetala corolla, a Flower consisting of nine Petals.

Enodis caulis, culmis, Stalks and Straws, having no Knots or Joints.

Ensatæ, Plants having sword-shaped Leaves, an Order of Plants in the *Fragmenta methodi naturalis* of *Linneus*.

Ensisforme folium, Leaves shaped like a two-edged Sword, tapering towards the Point.

Equitantia folia, riding, when the Sides of the Leaves approach in such a Manner as the outer embrace the inner.

Erectus caulis, ramus, folium, upright, perpendicular.

Erosum folium, gnawed, when the Leaf is sinuate, and the Margin appears as if it were gnawed or bitten.

Exserta stamina, standing forth, when the Stamina appear above the Corolla.

Exstipulatus, without Stipulæ.

Exsuccum folium, when the Substance of the Leaf is dry.

Extrafoliaceæ stipulæ, Stipula, growing on the Out side of the Leaves.

F

Farctum folium, stuffed, opposed to *Tubulosum*.

Fasciculata folia, bundled, Leaves growing in Bunches.

Fascicularis radix, bundled, tuberous Roots growing in Bundles.

Fasciata planta, when many Stalks grow together, like a Faggot or Bundle.

Fastigiati pedunculi, Pedunculi pointed at the Apex.

Fauces, the Jaws or Chops.

Femina planta, a Plant bearing female Flowers on the same Root only.

Fibrosa radix, a fibrous Root.

Filamentum, a Thread, applied to the thread-like Part of the Stamina.

Filices

Filices, Ferns, one of the Seven Divisions of the Vegetable Kingdom, and an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Filiform *filamentum*, Thread-shaped Stamina.

Fimbriata *petala*, a fringed Petal, as in *Menyanthus*.

Fissum *folium*, a Leaf split or cloven half-way down.

Fistulosus *caulis*, a piped or hollow Stem.

Flabellatum *folium*, a Fan-shaped Leaf.

Flaccidus *pedunculus*, the Foot-stalk of a Flower that is feeble and slender.

Flagellum, a Twig, or Shoot, like a Whip or Thong.

Flexuosus *caulis*, a Stalk, having many Turnings or Bendings, taking a different Direction at every Joint.

Floralia *folia*, floral Leaves that immediately attend the Flower.

Floralis *gemma*, Flower-buds.

Flos, a Flower.

Flosculus, a little Flower.

Foliaceæ *glandulae*, Glands growing on the Leaves.

Foliaris *cirrus*, a Tendril growing from a Leaf.

Foliaris *gemma*, Leaf-buds.

Foliatio *plantæ*, the Complication of the Leaves, whilst folded within the Gemma, or Bud.

Foliatus *caulis*, a leafy Stalk.

Foliifera *gemma*, a Bud producing Leaves.

Foliolum, a little Leaf, one of the single Leaves, which together constitute a compound Leaf.

Foliosum *capitulum*, covered with Leaves amongst the Flowers or Tops of the Plant.

Folium, a Leaf.

Fornicatum *petalum*, vaulted or arched, as in the upper Lip of the Flowers in the Class *Didynamia*.

Frequens *planta*, Plants growing frequently, or commonly, every where.

Frondefcentia, the Season of the Year when the Leaves of Plants are unfolded.

Frondosus *caudex*, a Species of Trunk composed of a Branch and a Leaf blended together, as is frequently united with the Frustrification.

Frustrifcentia, the Time of the Year when a Plant scatters its ripe Seeds.

Frustrificatio, the temporary Part of a Vegetable appropriated to Generation, terminating the old Vegetable, and beginning the new.

Frustranea *polygamia*, to no Purpose, the third Order of the Class *Syngenesia*.

Frutex, a Shrub.

Fruticosus *caulis*, a shrubby Stalk.

Fuga-

Fugacissima petala, Petals that are fleeting, and of short Duration.

Fulcratus caulis, Branches having Props, see Fulcrum.

Fulcrum, a Prop or Support.

Fungi, a Kind of Mushroom, one of the seven Families of Plants, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Furcata, forked.

Fusiform radix, a spindle-shaped Root.

G

Galea, a Helmet, applied to the Corolla of the Class Gynandria, as in Orchis.

Galeatum labium, the Lip of a Flower shaped like a Helmet.

Geminæ stipulae, Stipula growing in Pairs.

Geminatus pedunculus, double Foot-stalks growing from the same Point.

Gemma, a Bud, an Hibernaculum on the ascending Caudex.

Gemmatio, a young Bud.

Gemmiparus, bearing Buds.

Genera plantarum, Genera of Plants, the second Subdivision in the *Linnaean* System; it comprehends an Assemblage of Species, similar in their Parts of Fructification, under the same Class and Order.

Geniculatus caulis, culmus, pedunculus, a jointed Stalk, Straw, or Foot-stalk of a Flower.

Genicula, little Joints.

Germen, a Sprout or Bud, the Base of the Pistillum, the Rudiment of the Fruit yet in embryo.

Gibbum folium, bunching out, or gouty.

Glaber, smooth, having an even Surface.

Gladiata filiqua, a sword-shaped Pod.

Glandulae, a Gland, or secretory Vessel.

Glandulifera scabrities, a Kind of bristly Roughness on the Surface of some Plants, on which there are minute Glands at the Extremity of each Brittle.

Glareosis locis, gravelly Places, where Plants delight in Gravel.

Glaucophyllus, a blueish, or azure-coloured Leaf.

Globosa radix, a round Root.

Globularis scabrities, a Species of glandular Roughness, scarce visible to the naked Eye, the small Grains of which are exactly globular.

Glochoides, the small Points of the Pubes of Plants. *Linnaeus* applies this Term, only to the Hami Triglochoids, with three hooked Points.

Glomerata spica, Flowers crowded together in a globular Form.

Gluma,

Gluma, a Husk, or Chaff, a Species of Calyx peculiar to Corn and Grasses.

Glutinositas, like Glue or Paste.

Gramina, Grasses, one of the seven Families of the vegetable Kingdom.

Granulata radix, Roots consisting of many little Knobs, like Seeds or Grain, attached to one another by small Strings, as in *Saxifraga granulata*.

Gymnospermia, naked-seeded, the first Order of the Class *Dynamia*.

Gynandria, when the male and female Parts are joined together, the twentieth Class in the *Linnaean* System.

H

Habitualis character, the Character or Description of a Plant, taken from its Habit, which consists in the Placentatio, Radicatio, Ramificatio, Foliatio, Stipulatio, Pubescentia, Inflorescentia.

Habitus, the external Appearance; *Linnaeus* defines it, the Conformity or Affinity that the Congeners of Vegetables have to one another, in Placentation, Radication, &c.

Hamosa seta, hooked Bristles.

Hastatum folium, Leaves resembling the Head of a Spear or Halbert.

Hemisphericus calyx, half round, or half a Sphere.

Heptandria, seven Males, the seventh Class of the sexual System.

Herba, an Herb; according to *Linnaeus*, it is the Part of the Vegetable which arises from the Root; it is terminated by the Fructification, and comprehends the Stem, Leaf, Props, and Hibernacula.

Herbaceæ plantæ, are perennial Plants, which annually perish down to the Root.

Herbaceus caulis, Stalks that dry annually.

Hermaphroditus flos, Flowers that contain both Sexes, as *Anthera*, and *Stigma*.

Hesperidæ, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Hexagonus caulis, a Stalk with six Angles.

Hexandria, the sixth Class in the sexual System, which produce hermaphrodite Flowers, with six Stamina of equal Length.

Hexagynia, an Order of Plants that produces six Styles.

Hexapetala corolla, Flowers consisting of six Petals.

Hexaphyllis calyx, a Flower cup consisting of six Leaves.

Hians corolla, a monopetalous Flower that is gaping.

Hirsutus, rough, hairy.

Hispidus caulis, a Stalk covered with strong fragile Bristles.

Holeraceæ,

Holeraceæ, Pot Herbs, an Order of Plants in the *Fragmenta methodi naturalis* of *Linncæus*.

Horizontalis flos, Flowers growing with their Disk parallel to the Horizon.

Hybernaculum, Winter-lodge, the Part of a Plant that incloses and secures the Embryo from external Injuries.

Hybrida, a Bastard, a monstros Production of two Plants of different Species, like the Mule in the animal Creation.

Hypocrateriformis corolla, a monopetalous Flower, shaped like a Cup or Salver.

I

Icosandria, the twelfth Class in the sexual System.

Imberbis corolla, a Flower without a Beard.

Imbricatus, tiled, when the Scales of a Stalk, or Flower Cup, lie over one another in the Manner of Tiles upon a House.

Immutatæ, unaltered.

Impar, odd, applied to a pinnated Leaf terminating in an odd Lobe.

Inæqualis corolla, an unequal Flower.

Inanis caulis, hollow or empty Stalks.

Incanum folium, Leaves covered with whitish Down.

Incisum folium, Leaves cut into irregular Segments.

Incompletus flos, imperfect Flowers without Petals.

Incrassatus pedunculus, Foot-stalks of Flowers that increase in Thickness as they approach the Flowers.

Incumbens anthera, Anthera which are affixed to the Filament Sideways.

Incurvatus caulis, a Stalk bowed towards the Earth.

Indivisum folium, an entire undivided Leaf.

Inerme folium, unarmed, a Leaf without Bristles or Prickles.

Inferus flos, Flowers whose Receptacle are situated below the Germen.

Inflatum perianthium, a Calyx puffed out like a Bladder.

Inflexa folia, to bend inward towards the Stem.

Inflorescentia, Inflorescence, signifies the various Modes in which Flowers are joined to the Plant by the Pedunculus.

Infundibuliformis corolla, a monopetalous Flower shaped like a Funnel.

Insertus petiolus, a Foot-stalk inserted into the Stem.

Integrum folium, an entire or undivided Leaf.

Integerrimum folium, an entire Leaf, whose Margin is destitute of Incisions or Serratures.

Interfoliaceus pedunculus, Flower-stalks arising from between opposite Leaves.

Interrup-

- Interruptum folium pinnatum*, when the large Folioles of a winged Leaf are interrupted alternately by Pairs of smaller ones.
Interrupta spica, a Spike of Flowers, interrupted or broken by small Clusters of Flowers between the larger ones.
Intorsio, writhing or twisting.
Intrafoliaceæ stipulæ, Stipulæ growing on the Inside of the Leaves of the Plant.
Inundata loca, this Term is applied by *Linnaeus* to such Places that are overflowed only in Winter.
Involucellum, a partial Involucrum.
Involucrum, a Cover, the Calyx of the umbelliferous Plants standing at a Distance from the Flower.
Involuta folia, rolled in, Leaves when their lateral Margins are rolled spirally inwards on both Sides.
Irregularis flos, irregular Flowers of deformed Shapes.
Juba, a Crest of Feathers.
Julus, a Katkin.

L

- Labiatus flos*, a lipped Flower.
Lacerum folium, a Cleft or Fissure, Leaves whose Margin is cut into irregular Segments, as if rent or torn.
Lacinia, Segments or Incisions.
Laciniatum folium, a Leaf cut into irregular Incisions.
Lactescencia, Milky, those Plants are called milky, whose Juices are white, yellow, or red.
Lacunosum folium, Leaves that are deeply furrowed, by the Veins being sunk below the Surface.
Lacustris planta, Plants which grow in Lakes of Water.
Lamina, a thin Plate, the upper expanded Part of a polypetalous Flower.
Lana, Wool, a Species of Pubescence, which covers the Surface of Plants.
Lanatum folium, a woolly Leaf.
Lanceolatum folium, a lance-shaped Leaf.
Laterales flores, Flowers coming from the Sides.
Laxus caulis, loose, weak, slender.
Legumen, Pulse, a Pericarpium of two Valves, in which the Seeds are fixed along one Suture only.
Lenticularis scabrities, a Species of glandular Scabrities, in the Form of Lentils.
Leprosus, spotted like a Leopard, exemplified in *Lichen*.
Lævis caulis, smooth, having an even Surface.
Liber, the inner Rind or Bark of a Plant.
Lignosus caulis, a woody Stem.
Lignum, Wood.

Ligulatus

- Ligulatus flos*, when the Petals, tubulated at the Base, are plane linear towards the Middle, and widest at the Extremity, in form of a Bandage.
- Liliaceæ*, like a Lily, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Limbus*, a Border, the upper expanded Part of a monopetalous Flower.
- Linea*, a Line, the second Degree in the Linnæan Scale for measuring Plants, the twelfth Part of an Inch.
- Lineare folium*, a narrow Leaf, whose opposite Margins are almost parallel, as in *Pinus*.
- Lineatum folium*, Leaves whose Superficies are marked with parallel Lines, running lengthways.
- Lingulatum folium*, a Leaf shaped like a Tongue.
- Lobatum folium*, when Leaves are divided to the Middle into Parts that stand wide from each other, and have their Margins convex.
- Loculamentum*, a Cell, the Divisions of that Species of *Pericarpium* called a Capsula.
- Locus foliorum*, the particular Part of the Plant to which the Leaf is affixed.
- Lomentaceæ*, Bean Meal, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Longiusculus*, longish.
- Longum perianthium*, when the Tube of the Calyx is equal in Length to that of the Corollæ.
- Lucidum folium*, clear, shining.
- Lunatum folium*, Moon-shaped Leaves, when they are round and hollowed at the Base like a Half Moon.
- Lunulate*, shaped like a Crescent.
- Luridæ*, pale, wan, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Luxurians flos*, a luxuriant Flower.
- Lyratum folium*, Leaves shaped like a Harp or Lyre.

M

- Marcescens corolla*, Flowers withering on the Plant.
- Margo folii*, the Margin or Edge of the Leaf.
- Mas planta*, Male Plants, see Class *Dioecia*.
- Masculos flos*, Male Flowers, containing *Antheræ*, but no *Stigma*.
- Medulla*, Marrow, the Pith or Heart of a Plant.
- Membranaceum folium*, when Leaves have no distinguishable Pulp between their Surfaces.
- Membranatus caulis*, a Stalk covered with thick Membranes.

Monadelphia

- Monadelphia**, one Brother, the sixteenth Class in the sexual System.
Monandria, one Male, the first Class in the sexual System.
Monocotyledones, a Term in Placentation, applied to Plants whose Seed have a single Cotyledon.
Monoecia, one House, the Twenty-first Class in the sexual System.
Monogynia, one Female, the first Order of the first thirteen Classes in the *Linneæan* System.
Monopetala corolla, a Flower having one Petal.
Monophyllum involucreum, consisting of one Leaf.
Monosperma, having one Seed.
Miliaris scabrities, a Species of glandular Roughness appearing on the Surface of some Plants like Grains of Millet.
Mucronatum folium, a Leaf terminating in a sharp Point.
Multifidum folium, a Leaf divided into many linear Segments, or Divisions.
Multiflorus pedunculus, a Foot-stalk bearing many Flowers.
Multipartitum folium, a Leaf divided into many Parts.
Multiplicatus, flos, a luxuriant Flower, whose Corolla is multiplied so as to exclude some of the Stamina.
Multifiliquæ, many Pods, an Order of Plants in the *Fragmenta methodi naturalis* of *Linneæus*.
Muricatus caulis, a Stalk, whose Surface is covered with sharp Points, like the Murex Shell.
Muricatæ, an Order of Plants in the *Fragmenta methodi naturalis* of *Linneæus*.
Musci, Mosses, one of the seven Families in the Vegetable Kingdom, and an Order of Plants in the *Fragmenta methodi naturalis* of *Linneæus*.
Mutica gluma, when the Arista is wanting.
Mutilatus flos, a mutilated Flower.

N

- Natans folium**, a Leaf which swims on the Surface of Water.
Navicularis valvula, when the Valve of a Seed Vessel resembles a Ship.
Necessaria polygamia, necessary Marriages, the fourth Order of the nineteenth Class in the sexual System.
Nectarium, that Part of the Corolla that contains the Honey Juice.
Nervosum folium, Leaves whose Surface is full of Nerves or Strings.
Nidulantia semina baccarum, Seeds nestling in the Pulp of a Berry.
Niuidum folium, a bright shining glossy Leaf.

Nucamentaceæ, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Nucleus, a Kernel.

Nudus *caulis*, a naked Stalk.

Nutans *caulis*, a nodding Stalk.

Nux, a Nut.

O

Obcordatum *petalum*, a heart-shaped Petal, with its Apex downwards.

Obliquum *folium*, when the Apex of the Leaf points obliquely towards the Horizon.

Oblongum *folium*, an oblong Leaf.

Obsoletè lobatum *folium*, Leaves having Lobes scarce discernible.

Obtusum *folium*, Leaves blunt, or rounded at the Apex.

Obvolutum *folium*, rolled against each other, when their respective Margins alternately embrace the straight Margin of the opposite Leaf.

Octandria, eight Males, the eighth Class in the sexual System.

Officinalis, Plants used in Medicine, and kept in the Apothecaries Shops.

Operculum, a Cover, as in the Mosses.

Oppositi *rami folia*, Branches and Leaves that grow by Pairs opposite to each other.

Orbiculatum *folium*, round Leaves.

Orchideæ *orchis*, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Ordo, Order.

Orgya, a Fathom, or six Parisian Feet.

Ovale *folium*, an oval Leaf.

Ovarium, the Germen.

Ovatum *folium*, an oval, or egg-shaped Leaf.

P

Pagina *folii*, the Surface of a Leaf.

Palea, Chaff, a thin Membrane rising from a common Receptacle, which separates the Flosculi.

Paleaceus *pappus*, chaffy Down.

Palmæ, Palms, one of the seven Families of the Vegetable Kingdom.

Palmata *radix*, a handed Root, as in Orchis.

Palmatum *folium*, a Leaf shaped like an open Hand.

Palustris, marshy or fenny.

Panduriforme

- Panduriforme folium*, shaped like a Guitar, a musical Instrument so called.
- Panícula*, a Panicle, or loose Spike of Grass.
- Papilionaceus*, butterfly-shaped Flower, as in the Class *Diadelphia* of *Linnaeus*.
- Papilionaceæ*, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Papillosum folium*, a Nipple, a Leaf covered with Dots or Points like Nipples.
- Pappus*, Down.
- Papulosum folium*, a Leaf whose Surface is covered with Pimples.
- Parabolicum folium*, a Leaf in Form of a Parabola.
- Parallelum dissepimentum*, when the Dissepiments are parallel to the Sides of the *Pericarpium*.
- Parasitica planta*, Plants that grow only out of other Plants, as the *Viscum*.
- Partialis umbella*, a partial Umbel.
- Partiale involucrum*, when at the Base of the partial Umbel.
- Partitum folium*, a divided Leaf.
- Parvum perianthium*, a little Flower-cup, or comparatively small, opposed to *Magnum*.
- Patens caulis, ramus, &c.* spreading Stalks and Branches.
- Patulus calyx*, a spreading Cup.
- Paucifloris*, having few Flowers.
- Pedalis caulis*, a Stalk a Foot in Height.
- Pedatum folium*, a Species of compound Leaf, whose Divisions resemble the Toes of a Foot, as in *Helleborus Fœtida*.
- Pedicellus*, a little Foot-stalk.
- Peduncularis cirrhus*, a Tendril proceeding from the Foot-stalk of a Flower.
- Pedunculati flores*, Flowers growing on Foot-stalks.
- Pedunculus*, the Foot-stalk of a Flower.
- Peltatum folium*, when the Foot-stalk is inserted into the Disk of the Leaf, and not into its Base.
- Penicilliformia stigma*, a Stigma in form of a Painter's Pencil.
- Pentagonus caulis*, a five-angled Stalk.
- Pentagynia*, five Females, the fifth Order of a Class.
- Pentandria*, five Males, the fifth Class in the sexual System of *Linnaeus*.
- Pentapetala corolla*, a Flower consisting of five Petals.
- Pentaphyllus calyx*, a Calyx consisting of five Leaves.
- Perennis radix*, a perennial Root, continuing for many Years.
- Perfectus flos*, Flowers having Petals, the perfect Flowers of *Ray*, *Tournefort*, and other Botanists.
- Perfoliatum folium*, when the Base of the Leaf intirely surrounds

- the Stem, or when the Stalk grows through the Centre of the Leaf, as in *Craffula perfoliata*.
- Perforati cotyledones*, to be pierced through, a Species of the Monocotyledones exemplified in the Gramina; also an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Perianthium*, a Kind of Calyx, so called when contiguous to the Fructification.
- Pericarpium*, a Species of Pod that contains the Seed.
- Perichatium*, a Modification in the Receptaculum in the Musci and Algæ.
- Perpendicularis radix*, a perpendicular, or downright Root.
- Perfonatæ*, masked, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Pes*, a Foot.
- Petaliformia stigma*, a Stigma resembling the Shape of a Petal.
- Petalodes flos*, a Flower having Petals.
- Petalum*, the corollaceous Teguments of a Flower.
- Petiolaris cirrhus*, a Tendril proceeding from the Foot-stalk of a Leaf.
- Petiolatum folium*, a Leaf growing on a Foot-stalk.
- Petiolus*, a little Foot-stalk.
- Pileus*, a Hat or Bonnet, the orbicular Expansion of a Mushroom, which covers the Fructification.
- Pili*, Hairs.
- Pilosum folium*, Leaves whose Surface is covered with long distinct Hairs.
- Pinnatifidum folium*, (a winged Leaf) applied to simple Leaves whose *Lacinia* are transverse to the *Rachia*.
- Pinnatum folium*, a winged Leaf.
- Pipertæ*, Pepper, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Pistillum*, the Style, or Female Organ of Generation, whose Office is to receive and secrete the Farina Fecundans.
- Pixidatum folium*, a Kind of Foliage, where one Leaf is let in to another by a Joint, as in *Equisetum*.
- Placentatio cotyledons*, of the Seed.
- Planipetalus flos*, a Flower with plain flat Petals.
- Plantæ*, Plants, one of the seven Families of Vegetables, comprehending all which are not included in the other six Tribes.
- Planum folium*, plain flat Leaves.
- Plenus flos*, a full or double Flower.
- Plicatum folium*, a plaited Leaf.
- Plumata seta*, a feathered Hair or Bristle.
- Plumosus pappus*, a Kind of soft Down.
- Plumula*, the ascending scaly Part of the Corculum.

Pollen

- Pollen, Meal, the prolific Powder contained in the Anthera.
 Pollex, a Thumb, the Length of the first Joint of the Thumb, or a Parisian Inch.
 Polyadelphia, many Brotherhoods, the eighteenth Class in the sexual System.
 Polyandria, many Males, the thirteenth Class in the sexual System of *Linnaeus*.
 Polycotyledones, many Cotyledons.
 Polygamia, many Marriages, the twenty-third Class in the sexual System.
 Polygynia, many Females, an Order of some of the Classes in the sexual System.
 Polypetala *corolla*, a Flower consisting of many Petals.
 Polyphyllum *involucrum*, an Involucrum of many Leaves.
 Polystachius *culmus*, a Stalk of Grass having many Spikes.
 Pomaceæ *pomum*, an Apple, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
 Pomum, an Apple.
 Pori, Pores.
 Præmorsa *radix*, a Bitten Root, when it ends abruptly, as in Scabiosa.
 Preciæ, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
 Prismaticus *calyx*, a triangular Flower-cup.
 Procumbens *caulis*, lying on the Ground.
 Prolifer *flos*, Flowers growing through, or out of one another, either from the Centre or Side.
 Prominulum *diffipimentum*, to jet out beyond the Valves.
 Pronum *discum folii*, Leaves having their Face downwards.
 Propago, a Shoot, the Seed of Mosses.
 Proprium *involucrum*, an Involucrum when at the Base of an umbellated Flower.
 Pseudo, a Bastard.
 Pubes, Down or Hair, one of the seven Kinds of Fulcra.
 Pulposum *folium*, a Leaf having a pulpy or fleshy Substance.
 Pulveratum *folium*, a Leaf powdered with a Kind of Dust like Meal, as in *Primula Farinosa*.
 Punctatum *folium*, a Leaf sprinkled with hollow Dots or Points.
 Putamineæ, like a Shell, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Q

- Quadrangulare *folium*, a Quadrangular Leaf, having four prominent Angles in the Circumscription of its Disk.
 Quadrifidum *folium*, a Leaf divided into four Parts.

- Quadrjugum folium*, a Leaf having four Pair of Foliolles.
Quadrilobum folium, a Leaf consisting of four Lobes.
Quadripartitum folium, a Leaf consisting of four Divisions down to the Base.
Quaterna filia, when verticillate Leaves come by fours, having four in each Whorle.
Quina folia, verticillate Leaves coming by fives.
Quinatum folium, when a digitate Leaf has five Foliolles.
Quinquangulare folium, a Leaf having five prominent Angles in the Circumscription of the Disk.
Quinquejugum folium, when a pinnated Leaf has five Pair of Foliolles.
Quinquelobum folium, a Leaf having five Lobes.
Quinquesidum folium, a Leaf consisting of five Divisions, with linear Sinuses, and straight Margins.
Quinquepartitum folium, consisting of five Divisions down to the Base.

R

- Racemus*, a Bunch of Grapes or Currants, or any other Bunch of Berries that bears that Resemblance.
Rachis, the Back Bone, a Species of Receptaculum, as in the Panicum.
Rachis folii pinnati, the middle Rib of a winged Leaf, to which the Foliolles are affixed.
Radiatus flos, a Species of compound Flowers, in which the Florets of the Disk are tubular, and those of the Radius ligulate, as in the Class Syngenesia.
Radicalia folia, Leaves proceeding immediately from the Root.
Radicans caulis, a Stalk bending to the Ground, and taking Root where it touches the Earth.
Radicatum folium, Leaves shooting out Roots.
Radicula, a little Root.
Radius, a Ray, the ligulate Margin of the Disk of a compound Flower.
Radix, a Root.
Ramea folia, regards Leaves that grow only on the Branches, and not on the Trunk.
Ramosissimus caulis, Stalks abounding with Branches irregularly disposed.
Ramus, a Branch of a Tree.
Ramosus caulis, a Stalk having many Branches.
Receptaculum, a Receptacle, the Basis on which the Parts of Fruetification are connected.
Reclinatum folium, a Leaf reclined or bending downward.
Recurvatum

- Recurvatum folium*, a Leaf bent backwards.
Reflexus ramus, a Branch bent back towards the Trunk
Regularis corolla, a Flower whose Parts are regular in its Figure and Magnitude.
Remotus verticillus, when the Whorles of Flowers and Leaves stand at a Distance from one another.
Reniforme folium, a kidney-shaped Leaf.
Repandum folium, a Leaf having a bending or waved Margin, without any Angles.
Repens radix, a creeping Root extending horizontally.
Repens caulis, a creeping Stalk, either running along the Ground, on Trees, or Rocks, and striking Roots at certain Distances.
Reptans flagellum, creeping along the Ground, as in *Fragaria*.
Restantes pedunculi, Foot-stalks remaining on, after the Fructification has fallen off.
Resupinatio florum, when the upper Lip of the Flower faces the Ground, and the lower Lip is turned upwards.
Resupinatum folium, when the lower Disk of the Leaf looks upward.
Retroflexus ramus, a Branch bent in different Directions.
Retrofractus pedunculus, bent backwards towards its Insertion, as if it were broken.
Retusum folium, when the Apex of the Leaf is blunt.
Revolutum folium, a Leaf rolled back.
Rhæades, the red Poppy, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
Rhombeum folium, a Leaf whose Shape nearly resembles a Rhombus.
Rhomboideum folium, a Leaf of a geometrical Figure, whose Sides and Angles are unequal.
Rigidus caulis folia, stiff, hard, rigid.
Rimosus caulis, abounding with Clefts and Chinks.
Ringens, grinning and gaping.
Rosaceus flos, a Flower whose Petals are placed in a Circle, in Form like those of a Rose.
Rostellum, a little Beak, the descending plain Part of the *Coraculum* of the Seed.
Rotaceæ, a Wheel, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
Rotatus limbus, corolla, a wheel-shaped Flower, expanded horizontally, having a tubular Basis.
Rotundatum folium, a roundish Leaf.
Rubra laescentia, red Milkiness in Plants.
Ruderata loca, rubbishy Places.
Rugosum folium, a rough or wrinkled Leaf.

Sagit.

S

Sagittatum folium, an arrow-shaped Leaf.

Sarmentaceæ, a Twig or Shoot of a Vine, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Sarmentofus caulis, the Shoot of a Vine, naked between each Joint, and producing Leaves at the Joints.

Scaber caulis, et folium, scabby and rough, having Tubercles.

Scabridæ, rough, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Scabrities, a Species of Pubescens, composed of Particles scarce visible to the naked Eye, sprinkled on the Surface of the Plant.

Scandens caulis, a climbing Stalk.

Scapus, a Species of Stalk which elevates the Fructification, and not the Leaves, as in *Narcissus*.

Scariosum folium, Leaves dry on the Margin that sound when touched.

Scitamina, fair, beautiful, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Scorpioides flos, a Flower resembling the Tail of a Scorpion.

Scutellum, a Species of Fructification which is orbicular, concave, and elevated in the Margin, as in some Species of Lichen.

Scyphifer, cup-bearing, a Subdivision of the Genus Lichen.

Secretoria scabrities, a Species of glandular Roughness on the Surface of some Plants.

Secunda spica, a Spike of Grass with the Flowers turned all towards one Side.

Securiformis pubescentia, a Species of Pubes on the Surface of some Plants, the Bristles resembling an Axe or Hatchet.

Semen, Seed.

Seminale folium, Seed-leaves.

Semiteres caulis, Half a Cylinder, flat on one Side, and round on the other.

Sempervirens folium, an ever-green Leaf.

Sena folia, Leaves growing in Sixes, as in *Galium spurium*.

Senticolæ, a Briar or Bramble, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Sepiariæ, a Hedge, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.

Sericeum folium, a Leaf whose Surface is of a soft silky Texture.

Serratum folium, a sawed Leaf.

Sessile folium, a Leaf growing immediately to the Stem, without any Foot-stalk.

Setæ, a Bristle, a Species of Pubescens, covering the Surface of some Plants.

Setaceum folium, Leaves shaped like Bristles.

Sexus plantarum, Plants are distinguished by the Sex of their Flowers, which are either male, female, or hermaphrodite.

Silicula, a little Pod, a bivalve Pericarpium, see Class Tetrady-namia.

Siliqua, a Pod, a Pericarpium consisting of two Valves, in which the Seeds are fixed alternately to each Suture.

Siliquosa, the second Order in the Class Tetradynamia.

Siliquosæ, an Order of Plants in the Fragmenta methodi naturalis of *Linnaeus*.

Simplex caulis, a simple or single Stem.

Simplicissimus caulis, the most simple Stalk.

Sinuatum folium, a Leaf whose Sides are hollowed or scolloped.

Situs foliorum, the Disposition of Leaves on the Stem and Branches, which are either starry, by three's, opposite, alternate, scattered, or crowded.

Solidus caulis, a solid Stalk or Stem.

Solitarius pedunculus, when only one Flower-stalk proceeds from the same Part.

Solutæ stipulæ, loose, opposed to Adnatæ.

Spadix, the Receptaculum of a Palm, a Pedunculus which proceeds from a Spatha.

Sparsi rami, pedunculi folia, scattered without Order.

Spatha, a Species of Calyx resembling a Sheath.

Spathaceæ, like a Sheath, an Order of Plants in the Fragmenta methodi naturalis of *Linnaeus*.

Spatulatum folium, a Leaf in Form of a Spatula, an Instrument used to spread Salve.

Species plantarum, the third Subdivision in the *Linnaean* System.

Spica, a Spike, a Species of Inflorescence resembling an Ear of Corn.

Spica secunda, when the Flowers all turn towards one Side.

Spica disticha, when the Flowers are in two Rows, and look two Ways.

Spicula, a little Spike.

Spinæ, Thorns or rigid Prickles.

Spinosus caulis, strong Prickles, whose Roots proceed from the Wood of the Stem, and not from the Surface of the Bark.

Spirales cotyledones, seminal Leaves twisted spirally.

Spithama, a Span, or seven Parisian Inches.

Splendentia folia, a shining Leaf.

Squamosa radix, a scaly Root.

Squarrosus, rough, scaly, or scurfy.

Stamen, the Filaments that sustain the Anthera.

Stamineus flos, Flowers having Stamina, and no Corolla.

Statuminatæ, a Prop, an Order of Plants in the Fragmenta methodi naturalis of *Linnaeus*.

Stellata folia, Leaves surrounding the Stem, like the Rays of a Circle.

Stel-

- Stellata feta*, a Species of Pubescens called Bristles, when they arise from a Center in Form of a Star, as in the *Mesembryanthemum barbatum*.
- Stellata planta*, one of Mr. Ray's Classes, the Tetrandria Monogynia of *Linnaeus*.
- Stellatæ*, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Sterilis flos*, a barren Flower, Masculus of *Linnaeus*.
- Stigma*, Apex of the Pistillum.
- Stimuli*, Stings.
- Stipitatus pappus*, a Kind of Trunk that elevates the Down and connects it with the Seed.
- Stipula*, one of the Kinds of Fulcra of Plants, generally growing on each Side of the Base of the Foot-stalks of Leaves or Flowers, and are either by two's, single, deciduous, abiding, adhering, loose, on the Inside of the Foot-stalks, or on the Outside.
- Stipulares glandulæ*, Glands produced from *Stipulæ*.
- Stolo*, a Shoot, which running on the Surface of the Ground strikes Root at every Joint, as in *Fragaria* and others.
- Striatus caulis, culmus, &c.* channelled Streaks, running lengthwise in parallel Lines.
- Strictus caulis*, straight stiff Shoots.
- Strigæ*, Ridges, Rows.
- Strobilus*, a Species of Pericarpium, formed from an Amentum, as the Cone of the Pine-tree.
- Stylus*, that Part of the Pistillum which elevates the Stigma from the Germen.
- Submersum folium*, when aquatic Plants have their Leaves sunk under the Surface of the Water.
- Subramosus caulis*, a Stalk having few Branches.
- Subrotundum folium*, a Leaf almost round.
- Subulatum folium*, an awl-shaped Leaf.
- Speculentæ juicy*, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
- Suffrutex*, an under Shrub.
- Sulcatus caulis, culmus*, a Stalk deeply furrowed lengthways.
- Superflua polygamia*, superfluous, the second Order in the Class Syngenesia.
- Superus flos*, when the Receptacle of the Flower stands above the Germen.
- Supra-axillaris pedunculus*, the Foot-stalk of a Flower, whose Insertion is above the Angle formed by the Branch.
- Supra-decomposita folia*, are composite Leaves which have little Leaves growing on a subdivided Foot-stalk.
- Supra-foliaceus, pedunculus*, the Foot-stalk of a Flower inserted into the Stem immediately above the Leaf.

Surculus, a Twig, the Stalks or Branches of Mosses.
 Syngenesia, to generate together, the nineteenth Class in the sexual System.

T

- Tegumentum, a Cover, the Perianthium and Corolla.
 Teres *caulis*, *folium*, a cylindrical Stalk, or Leaf.
 Tergeminum *folium*, *compositum*, a Leaf three Times double, when a dichotomus petiolus is subdivided, having two Foliola on the Extremity of each Division.
 Terminalis *flos*, Flowers terminating a Branch.
 Terna *folia*, Leaves in Whorles by three's.
 Ternatum *folium*, Leaves with three Foliola on a Petiolus.
 Tessellatum *folium*, a chequered Leaf, whose Squares are of different Colours.
 Tetradynamia, the Superiority or Power of four, the fifteenth Class in the sexual System.
 Tetragonus *caulis*, a four-cornered or square Stalk.
 Tetragynia, four Females, the fourth Order of some of the Classes in the sexual system.
 Tetrandria, four Males, the fourth Class in the sexual System.
 Tetrapetala *corolla*, a Flower consisting of four Petals.
 Tetraphyllus *calyx*, a Flower-cup consisting of four Leaves.
 Tetrasperma *planta*, producing four Seeds.
 Thalamus, a Bed, the Receptacle.
 Theca, a Sheath.
 Thyrsus, a Spike like a Pine-cone.
 Tomentosus *caulis*, *folia*, a Stalk and Leaf covered with a whitish Down like Wool.
 Tomentum, a Species of Pubescence, covering the Surface of some Plants of woolly or downy Substance.
 Torosum *pericarpium*, brawny Protuberances, like the Swelling of the Veins when a Pericarpium is bunched out by the inclosed Seeds.
 Torta *corolla*, when the Petals of a Flower are twisted, as in Nerium.
 Tortilis *arista*, Awns or Beards of Corn twisted like a Skrew.
 Transversum *dissepimentum*, when the Dissepiments are at right Angles with the Sides of the Pericarpium.
 Trapeziforme *folium*, a Leaf having four prominent Angles, whose Sides are neither equal nor opposite.
 Triandria, three Males, the third Class in the sexual System.
 Triangulare *folium*, a triangular Leaf.
 Tricocca *capsula*, a Capsule with three Cells, and a single Seed in each Cell.
 Tricoccae, an Order of Plants in the Fragmenta methodi naturalis of Linnaeus.

Tri-

- Tricuspidata*, three-pointed.
Trifidum folium, a Leaf divided into three linear Segments, having straight Margins.
Triflorus pedunculus, a Foot-stalk bearing three Flowers.
Trigonus caulis, a three-sided Stalk.
Trigynia, three Females, the third Order in some of the Classes.
Trihillata, a Seed having three Eyes.
Trijugum folium, a winged Leaf, with three Pair of Foliola.
Trilobum folium, a Leaf having three Lobes.
Trinervum folium, a Leaf having three strong Nerves running from the Base to the Apex.
Trioecia, three Houses, the third Order in the Class Polygamia in the sexual System.
Tripartitum folium, a Leaf divided into three Parts down to the Base.
Tripetala corolla, a Flower consisting of three Petals.
Tripetaloides, three petaled, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
Triphyllus calyx, a Cup consisting of three Leaves.
Triplinatum folium, compositum, a Leaf having a triple Series of Penna, or Wings.
Triplinerve folium, a Leaf having three Nerves running from the Base to the Apex.
Triquetrum folium, caulis, Leaves and Stalks having three plain Sides.
Trisperma, three-seeded, as in *Euphorbia*.
Triternatum folium, compositum, a compound Leaf when the Divisions of a triple Petiolus are subdivided into threes.
Trivalve pericarpium, a Pod consisting of three Valves.
Truncatum folium, a Leaf having its Apex as it were cut off.
Truncus, the Body or Stem of a Tree.
Tuberculatus, having Pimples or Tubercles.
Tuberculum, a little Pimple.
Tuberosa radix, a tuberous or knobbed Root.
Tubulatum perianthium, tubular Flowers, as in the Class *Didynamia*.
Tubulosi flosculi, tubular Florets nearly equal, one of the three Divisions of compound Flowers.
Tubus, a Tube, the lower and narrow Part of a monopetalous Flower.
Tunicatus radix, a Species of bulbous Root, having Coats lying one over another, from the Centre to the Surface, as in the Onion, Tulip, &c.
Turbinatum pericarpium, a Kind of Pod shaped like a Top, narrow at the Base and broad at the Apex.

Tur-

Turgidum legumen, swollen, puffed out, as in *Ononis*.
Turio, the young Buds, or Shoots of Pines.

V

- Vaginales*, sheathed, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
Vaginans folium, a Leaf like a Sheath, whose Base infolds the Stem.
Valvula, a Valve, a Partition of the external Cover of that sort of Pericarpium called Capsula.
Vegetabilia, one of the three Kingdoms of Nature.
Venosum folium, the Veins which run over the whole Surface of a Leaf.
Ventricosa spica, a Spike narrowing at each Extremity, and bellying out in the Middle.
Ventriculosus calyx, a Flower-cup bellying out in the Middle, but not in so great a Degree as *Ventricosus*.
Vepreculæ, a Briar, or Bramble, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
Verrucosa capsula, a Capsule having little Knobs, or Warts on its Surface.
Versatilis anthera, when the Anthera is fixed by the Middle on the Point of the Filament, and so poised as to turn like the Needle of a Compass.
Verticalia folia, Leaves so situated that their Base is perpendicular above the Apex.
Verticillati rami, flores, folia, Branches, Flowers, or Leaves surrounding the Stem, like the Rays of a Wheel.
Verticillatæ, an Order of Plants in the *Fragmenta methodi naturalis* of *Linnaeus*.
Verticillus, a Species of Inflorescence, in which the Flowers grow in Whorles, as in *Mentha*.
Vesicula, a little Bladder.
Vesicularis scabrities, a Kind of glandular Roughness, resembling *Vesiculæ*.
Vexillum, a Standard, the upright Petal of a papilionaceous Flower.
Villosus caulis, folium, a Stalk, or Leaf, covered with soft Hairs.
Virgatus caulis, Stalks shooting out; slender, straight Branches or Rods.
Viscidum folium, a Leaf whose Surface is clammy.
Viscositas, glewy, clammy.
Uliginosa loca, boggy Places.
Umbella, an Umbel or Umbrella.

Um-

Umbellatus flos, an umbellated Flower, as in *Pentandria Digynia*.

Umbellula, a little Umbel.

Umbilicatum folium, a peltate Leaf, shaped like a Navel, at the Insertion of the Foot-stalk.

Uncinatum stigma, a hooked Stigma.

Undatum folium, a waved Leaf, whose Surface rises and falls in Waves towards the Margin.

Undulata corolla, a Flower whose Petals are waved.

Unguis, a Nail, or Claw, that Part of a Petal that is joined to the Receptacle.

Unicus flos, one Flower.

Unicus radix, a single Root.

Uniflorus pedunculus, one Flower on a Foot-stalk.

Unilateralis racemus, a Bunch of Flowers growing on one Side.

Universalis umbella, an universal Umbel.

Volva, the membranaceous Calyx of the Fungi.

Volubilis caulis, a twining Stalk.

Urceolata corolla, a pitcher-shaped Flower.

Urens caulis, folium, a Leaf, or Stalk, burning, stinging, as Nettles.

Utriculi, a Species of glandular, secretory Vessels, on the Surface of various Plants.

Vulgaris, common, the trivial Name of many Plants in the Books of old Botanists.



F I N I S.